GONDEO DISER'S GUIDE





Hi-Fi









Go-Video is a registered trademark of Sensory Science Corporation. Dolby, Pro Logic, and the double-D symbol are trademarks of Dolby Laboratories Licensing Corp. DTS is a trademark of DTS Technology, LLC. VCR Plus+ and PlusCode are registered trademarks of Gemstar Development Corporation. The VCR Plus+ system is manufactured under license from Gemstar Development Corporation. All other brand and product names are trademarks or registered trademarks of their respective companies. Copyright ©2000 Sensory Science Corp. All rights reserved.

DVR5000

User's Guide

Go-Video, Inc.

A Division of Sensory Science Corp. 7835 East McClain Drive Scottsdale, Arizona USA 85260 www.govideo.com www.sensoryscience.com

WARNING:

To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture. Do not open the cabinet; dangerous high voltage is present. Refer servicing to qualified personnel only. This DVD-VCR should only be used with 120V, 60Hz (standard U.S. household) current.

WARNING:

TO AVOID HAZARDOUS EXPOSURE TO INVISIBLE LASER RADIATION, DO NOT OPEN OR REMOVE/DEFEAT LASER TRANSPORT PROTECTIVE HOUSING.

USER/INSTALLER CAUTION:

Your authority to operate this FCC certified equipment could be voided if you make changes or modifications not expressly approved by the manufacturer, who is responsible for compliance with Part 15 FCC rules.

NOTE TO CATV SYSTEM INSTALLER:

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the National Electronic Code that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Copy Notification

Federal law provides severe civil and criminal penalties for the unauthorized reproduction, distribution, or exhibition of copyrighted motion pictures and videotapes. (Title 17, United States Code, Sections 501 and 506).

Macrovision Notification

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.





This symbol is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute risk of fire or electric shock.



This symbol is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying this product.

CAUTION:

To prevent fire, shock hazard, or annoying interference, use only the recommended accessories. To prevent electric shock, do not use this (polarized) plug with an extension cord, receptacle, or other outlet unless the blades can be fully inserted to prevent blade exposure. To reduce the risk of electric shock, do not remove the unit cover or back. There are no serviceable parts inside. Refer servicing to qualified personnel only.

CUIDADO:

Para prevenir incendio, riesgo de choque, o interferencia enfadosa, use solamente los accesorios recomendados. Para prevenir electrochoque, no use este enchufe (polarizado) con un cordón de extensión, toma de corriente, o cualquier otra toma a menos que los dientes puedan ser completamente insertados para prevenir exposición de los dientes. Para reducir el riesgo de descarga eléctrica, no remueva la cubierta o la parte posterior del equipo. Dentro del equipo no hay partes que requieren servicio. Diríjase solamente a personal calificado cuando requiera servicio.

ATTENTION:

Pour éviter les incendis, risque de chocs, ou interférences fâcheuses, employer seulement les accessoires recommandés. Pour éviter les chocs électriques, ne pas employer cette prise (polarisée) avec une rallonge, une prise de courant ou une autre sortie de courant à moins que les lames peuvent être insérées à fond pour l'exposition des lames. Pour réduire les risques de chocs électriques, ne pas retirer le couvercle ou l'arrière du module. Il n'y a pas de pièce utilisable à l'intérieur. Ne faire effectuer l'entretien que par un personnel qualifié.

Table of Contents

Safety v	
Important Safety Instructions	V
Welcome 1	
UnpackingFeature Summary	
1 - System Overview 3	
Remote Control Overview	
Front Panel Overview	
Front Panel DisplayRear Panel	
2 - Getting Started 7 Basic Connections Auto Setup	
3 - Basic Operation 11	
Deck Control Keys	
Basic DVD Playback	
Basic VHS PlaybackBasic TV Tuner Operations	
4 - System Setup 15	
On-Screen Menu Navigation	
Menu Language	
National Clock Set	

Time Zone	20
Auto Clock Set Channel	21
Tuner Band Setting	22
Auto Channel Search	
Add/Remove Channels	24
Show Weak Channels	25
Tuner Audio	26
Child Lock	27
Front Panel Dimmer	28
5 - DVD Setup 29	
TV Aspect Ratio	29
Still Mode	
Black Level	
Audio Language	
Subtitle Language	
Disc Menu Language	
Dynamic Compression	
Rating Control Settings	
Changing the Rating Control Password	38
6 - Surround Sound Setup 39	
A/V Receiver Connections	39
Dolby Digital Decoder Setting	
DTS Decoder Setting	
Speaker Setup Overview	
Front Speaker/Subwoofer Settings	
Center/Rear Speaker Settings	
Testing Your Speaker Levels	

7 - DVD Operations 49

Special Playback Features	49
Disc Menu Navigation	51
Title/Chapter/Time Selection	52
Zoom	
Angle	54
Subtitle	55
A-B Repeat	56
Repeat Chapter/Title	
Audio	
Bookmarks	59
Programmed Playback	
Random Playback	
MP3 Playback	
3D Sound	
Special Playback Features	
Tracking	66
Auto Play/Rewind	67
S-VHS Playback	68
9 - VCR Recording 69	
Basic Recording	69
Special Recording Features	
One-Touch Recording (OTR)	71
Record Speed	
Record Source	
Date/Time Stamp	
Copying from DVD To VHS	
13 3	

10 - Timer Recording //	
How to Set a Timer Recording	
Timer Recording Errors/Solutions	
•	
11 - VCR Plus+ Recording 83	
VCR Plus+ Channel Mapping	83
VCR Plus+ Channel Worksheet	
How to Set a VCR Plus+ Recording	
VCR Plus+ Timer Extend	88
12 - Search/Index Features 89	
The Clock/Counter Button	89
Placing Index Marks	
Index Scan	
Index Search	
Blank Search	
Direct Time Search	
Appendix A - Advanced Connections 97	
S-Video/Component Video Connections (for DVD)	
Alt Video Out Setting	
Stereo Connections	
Monitor TV Connections	
Cable Box Connections	
Cable Box Control Setup	
Appendix B - Help 109	
Technical Specifications	
DVD-VCR Limited Warranty	11 ⁻

Safety

Important Safety Instructions

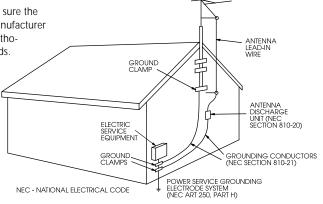
- READ INSTRUCTIONS All the safety and operating instructions should be read before the DVD-VCR is operated.
- 2. RETAIN INSTRUCTIONS The safety and operating instructions should be retained for future reference.
- 3. **HEED WARNINGS** All warnings on the DVD-VCR and in the operating instructions should be adhered to.
- 4. FOLLOW INSTRUCTIONS All operating and maintenance instructions should be followed.
- CLEANING Unplug this DVD-VCR from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a dry cloth for dusting cabinet.
- **6. ATTACHMENTS** Do not use attachments not recommended by the product manufacturer, as they may be hazardous.
- 7. WATER & MOISTURE Do not use this DVD-VCR near water—for example, near a bathtub, wash bowl, kitchen sink, laundry tub, in a wet basement, near a swimming pool or the like.
- 8. ACCESSORIES Do not place this DVD-VCR on an unstable cart, stand, tripod, bracket or table. The DVD-VCR may fall, causing serious injury to a child or adult, and serious damage to the unit. Use only with a cart, stand, tripod, bracket or table recommended by the manufacturer or sold with the DVD-VCR. Any mounting of the unit should follow the manufacturer's instructions and should use a mounting accessory recommended by the manufacturer.
- **8a.** An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
- 9. VENTILATION Slots and openings in the cabinet are provided for ventilation to ensure reliable operation of the DVD-VCR and to protect it from overheating. These openings must not be blocked or covered. Never place your VCR on a bed, sofa, rug or other similar surface, on or near a radiator or heat register. This DVD-VCR should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
- 10. POWER SOURCES This DVD-VCR should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home consult your appliance dealer or local power company.
- 11. GROUNDING OR POLARIZATION This DVD-VCR may be equipped with either a polarized 2-wire AC line plug (a plug having one blade wider than the other) or a 3-wire grounding plug having a third (grounding) pin.
 - The 2-wire polarized plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet try reversing the plug. If the plug still fails to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
- 12. POWER-CORD PROTECTION Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords of plugs, convenience receptacles, and the point where they exit from the DVD-VCR.
- 13. OUTDOOR ANTENNA GROUNDING If an outside antenna or cable system is connected to the DVD-VCR, be sure the antenna or cable system is grounded to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See figure below.



PORTABLE CART WARNING

(Symbol provided by RETAC)

- 14. LIGHTNING For added protection of this DVD-VCR during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the DVD-VCR due to lightning and power line surges.
- 15. POWER LINES An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, where it can fall into such power lines or circuits. When installing an outside antenna system extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
- 16. OVERLOADING Do not overload wall outlets and extension cords as this can result in the risk of fire or electric shock.
- 17. OBJECTS AND LIQUIDS Never push objects of any kind into this DVD-VCR through openings as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquids of any kind onto the unit. Should spillage occur, unplug the DVD-VCR and have it checked by a technician before use.
- 18. SERVICING Do not attempt to service this DVD-VCR yourself as opening or removing covers may expose you to a dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
- 19. DAMAGE REQUIRING SERVICE Unplug this DVD-VCR from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - a. When the power supply cord or plug is damaged.
 - **b.** If any liquid has been spilled onto or objects have fallen into the DVD-VCR.
 - c. If the DVD-VCR has been exposed to rain or water.
 - d. If the DVD-VCR does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the DVD-VCR to its normal operation.
 - e. If the DVD-VCR has been dropped or the cabinet has been damaged.
 - f. When the DVD-VCR exhibits a distinct change in performance—this indicates a need for service.
- 20. REPLACEMENT PARTS When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or those having the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.
- 21. SAFETY CHECK Upon completion of any service or repairs to this DVD-VCR ask the service technician to perform safety checks to determine that the DVD-VCR is in safe operating order.
- HEAT This DVD-VCR should be situated away from heat sources such as radiators, stoves, or other products (including amplifiers) that produce heat.

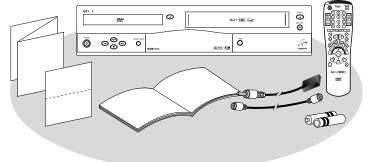


Unpacking

1 Unpack your DVD-VCR

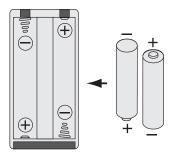
As you unpack, please check that the following items are included in your DVD-VCR packing case:

- DVD-VCR (1)
- Read Me First/Quick Reference Guide (1)
- Warranty/Registration Card (1)
- User's Guide (1)
- Cable Mouse for Cable Box Control (1)
- RF (Radio Frequency) Antenna Cable (1)
- Remote Control (1)
- 1.5V "AA" Batteries (2)



2 Insert Remote Control Batteries

- Remove the battery cover by pushing down on the thumb tab and sliding the cover in the direction of the arrow.
- Insert two 1.5V "AA" batteries as shown, paying attention to the correct polarities (+/-).
- When finished, slide the cover until it clicks back into place.



Feature Summary

System Features

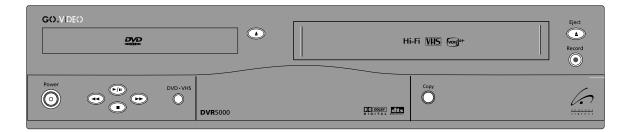
- Complete versatility to play DVD, VCDs, audio CDs or VHS Tapes.
- Watch a DVD while recording a TV show to the VCR.
- Auto Setup automatically sets clock and searches for channels.
- A/V switching between TV, VCR and DVD deck with TV view button for ease of use.
- Joystick remote with glow-in-the-dark keys controls both DVD and VCR decks.
- Composite, S-Video and Component video outputs for high connectivity and optimum performance.
- Cable box control allows hookup and control of user's cable box for timer recording.
- Headphone jack with volume control.
- RF inputs and outputs for connection to all TVs-new or old.
- · Child Lock.
- English/French/Spanish on-screen programming.
- Records from DVD to VHS (unless DVD is copy protected with Macrovision).

DVD Features

- 10-bit video digital to analog converter and 27MHz advanced digital filter.
- Playback of 96KHz/24-bit sources.
- Dolby Digital® 5.1 channel Surround Sound decoder.
- dts digital output for dts-enhanced DVDs.
- Playback MP3 files from CD-ROM.
- · Compatible with CD-R.
- Continued audio during 2x speed playback.

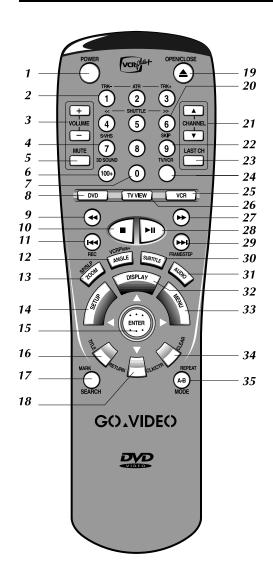
VCR Features

- Hi-Fi Stereo VCR.
- 4 heads for superior slow motion and stop action.
- VCR Plus+ C3™ programs your VCR, cable box and satellite in one easy step.
- Playback of S-VHS tapes at better than standard resolution.
- VISS Index Search/Scan, Zero Return, Direct Time Search, Blank Search.
- 16-event/1 year timer recording.
- Time remaining counter, real time counter.
- Headphone jack with volume control.



1 - System Overview

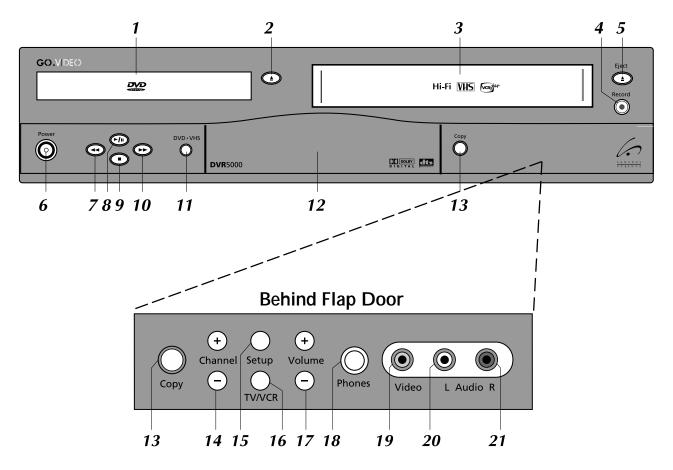
Remote Control Overview



- **1** POWER (p.11)
- 2 AUTO TRACKING (p.66) TRACKING +/- (p.66)
- **3** VOLUME +/- (p.14)
- 4 S-VHS (p.68)
- **5** MUTE (p.14)
- **6** 100+ (p.14)
- **7** 0-9 (p.14)
- **8** DVD (p.11)
- **9** REWIND (p.49, 65)
- **10** STOP (p.50)
- **11** SKIP BACK (p.49, 65) RECORD (p.69)
- **12** ANGLE (p.54) VCR Plus+ (p.85)
- **13** ZOOM (p.53) SP/SLP (p.72)
- **14** SETUP (p.15)
- **15** JOYSTICK (p.15, 51)
- **16** TITLE (p.51)
- **17** SEARCH (p.91) MARK (p.59, 90)

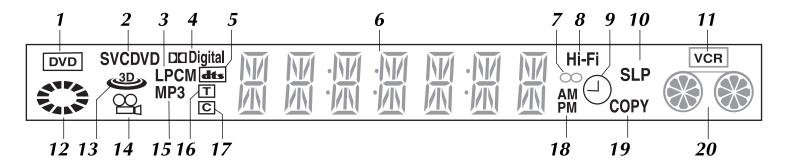
- 18 RETURN (p.15) CLOCK/COUNTER (p.89)
- 19 OPEN/CLOSE (p.12)
- **20** SHUTTLE <</>> (p.65)
- 21 CHANNEL +/- (p.14)
- **22** SKIP (p.65)
- 23 LAST CHANNEL (p.14)
- 24 TV/VCR (p.14)
- 25 VCR (p.11)
- 26 TV VIEW (p.11)
- 27 FAST-FORWARD (p.49, 65)
- 28 PLAY/PAUSE (p.12, 13)
- **29** SKIP NEXT (p.49) FRAME/STEP (p.65)
- 30 SUBTITLE (p.55)
- 31 AUDIO (p.26, 58)
- 32 DISPLAY (p.14, 52, 65)
- 33 MENU (p.51)
- **34** CLEAR (p.15)
- **35** AB REPEAT (p.56) REPEAT (p.57, 65) MODE (p.60, 61)

Front Panel Overview



- 1 DVD DECK (p.11)
- 2 DVD OPEN/CLOSE (p.12)
- **3** VCR DECK (p.11)
- 4 RECORD (p.69)
- **5** VCR EJECT (p.13)
- 6 POWER (p.11)
- **7** REWIND (p.49, 65)
- 8 PLAY/PAUSE (p.12, 13)
- **9** STOP (p.50)
- **10** FAST-FORWARD (p.49, 65)
- 11 DVD-VHS SELECT (p.11)
- 12 FRONT PANEL DISPLAY (p.5)
- **13** COPY (p.75)
- **14** CHANNEL +/- (p.14)
- **15** SETUP (p.15)
- 16 TV/VCR (p.14)
- 17 HEADPHONE VOLUME +/-
- **18** STEREO HEADPHONE JACK
- 19 LINE 1 COMPOSITE VIDEO JACK
- **20** LINE 1 LEFT AUDIO JACK
- 21 LINE 1 RIGHT AUDIO JACK

Front Panel Display

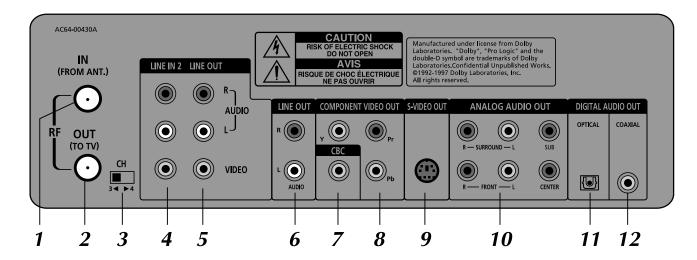


When lit, indicates that...

- 1 The DVD Deck is active
- 2 A DVD, CD, VCD, or SVCD is loaded
- 3 A disc with LPCM (Linear Pulse Code Modulation) audio is loaded
- 4 A DVD with a Dolby Digital 5.1 is loaded
- 5 A DVD with a DTS 5.1 soundtrack is loaded
- **6** The time, counter position, time remaining, or current deck status is displayed
- 7 The current TV show or video is broadcast in Stereo
- 8 The Hi-Fi track of a VHS tape is playing
- **9** A Timer Recording is programmed or in progress. If blinking there is an error. Also displays without the clock hands to indicate that a recording is in progress, and blinks when the VCR is in Pause mode.

- 10 The VCR Record Speed is set to SP or SLP
- 11 The VCR Deck is active
- 12 The status of the DVD deck is graphically displayed
- 13 3D Sound is active
- 14 The DVD has multiple angles to choose from
- 15 A CD with MP3 tracks is playing
- 16 The number to the right of the "T" symbol is the current title number
- **17** The number to the right of the "C" symbol is the current chapter number
- 18 The current time is a.m. or p.m.
- **19** DVD to VHS copy is in progress
- 20 The status of the VCR deck is graphically displayed

Rear Panel



- 1 RF ANTENNA INPUT
- 2 RF OUT TO TV
- 3 VCR TUNER CHANNEL SELECTOR
- 4 LINE IN 2
- 5 LINE OUT TO TV (COMPOS-ITE)
- 6 LINE OUT TO TV (S-VIDEO OR COMPONENT)
- 7 CABLE BOX CONTROL
- 8 COMPONENT VIDEO OUT
- 9 S-VIDEO OUT
- **10** ANALOG AUDIO OUT
- 11 DIGITAL AUDIO OUT (OPTICAL)
- 12 DIGITAL AUDIO OUT(COAXIAL)

2 - Getting Started

Basic Connections

In this chapter, you will connect the DVD-VCR to your television and run Auto Setup, which automatically searches for channels and sets the player's internal clock.

NOTES:

- Advanced Connections are covered in Appendix A.
- Even if you plan to use the S-Video or Compo-

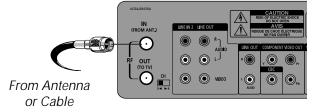


nent Video Outputs vou MUST connect the DVD-VCR to

vour television with either the standard RF or the Line Out connection. This enables you to operate the DVD-VCR setup menus.

Connect Antenna/Cable to DVD-VCR

Connect the RF antenna cable from your indoor/outdoor antenna or cable wall outlet to the IN (FROM ANT.) jack on the back panel of the DVD-VCR.



2 Connect DVD-VCR to TV

Choose one of the following methods to connect the DVD-VCR to your TV:

RF Connection

Connect the supplied RF antenna cable from the OUT (TO TV) jack on the back panel of the DVD-VCR to your television's Antenna Input.

OR

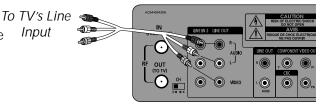
Line Connection

Connect an RCA-type audio/video cable (red, white, yellow) from the Line Out jacks on the back panel of the DVD-VCR to your television's Line In jacks. Use red for right audio, white for left audio, and yellow for video.

NOTE: It is recommended that you use the Line Connection if your TV is equipped with RCA jacks.



Input



3 Set DVD-VCR Output Channel

If you used the RF connection in Step 2, set the Channel switch on the back panel of the DVD-VCR to 3 or 4, whichever is not an active channel in your area.



4 Plug In DVD-VCR

Connect the DVD-VCR power cord to a standard 120V/60Hz wall outlet.



5 Turn On DVD-VCR

Press the **Power** button on the remote control or on the DVD–VCR's front panel.





6 Turn On TV

Press the **Power** button on your TV.



7 Set TV to Channel 3 or 4 or Line

Be sure to use the same channel you selected in Step 3. If you used the Line Connection, set your TV to its Line Input. The "Language/Langue/Idioma" menu should appear on the screen. Please continue with Auto Setup on the following page.



Auto Setup

The first time you connect your DVD-VCR, or after an extended power outage, you will be prompted to set the on-screen menu language and connect an Antenna or Cable. Then the DVD-VCR will run an Auto Setup procedure, where it will automatically search for all active channels and set the clock.

1 Set the On-Screen Menu Language

Press 1, 2, or 3 to select English, French, or Spanish. To change the language at any other time, see page 16.





2 Antenna/Cable Reminder

A message is displayed to remind you to connect an Antenna or Cable if you have not already done so. Press **Enter** to begin Auto Setup.



Connect Antenna or Cable and press ENTER

3 Run Auto Setup

As soon as you press **Enter**, the screen at right will appear and the DVD-VCR will automatically perform the following steps:

- Auto Channel Search Automatically detects whether an antenna or cable is connected, then searches for all active channels in your area. If Auto Channel Search is unable to locate channels in your area, you can search and add channels manually; see pages 23-24.
- Auto Clock Set Sets the DVD-VCR's internal clock. If Auto Clock Set is unable to find a channel to set the clock, you can set the clock manually; see page 17.

Searching For Channels And Setting Clock

Please Wait...

This procedure may take a few minutes to complete. When finished, the DVD-VCR will tune to the lowest channel found.

4 Auto Setup is Complete!

Please proceed to Chapter 3 for an introduction to the basic operations of the DVD-VCR.

Deck Control Keys

The DVD-VCR uses one set of controls to operate both decks. The following keys are helpful in successfully controlling each deck.

Power Button

Press the Power button on the remote control or front panel to turn on the DVD-VCR.





DVD Button

Press the DVD button on the remote control when you want to control the DVD deck.





• The DVD indicator will light on the Front Panel Display to show that the DVD deck is selected.

VCR Button

Press the VCR button on the remote control when you want to control the VCR deck.





• The VCR indicator will light on the Front Panel Display to show that the VHS deck is selected.

DVD-VHS Toggle

Press the DVD-VHS button on the front panel to toggle control between the DVD deck and the VCR deck.



The TV View Key

Press the TV View key repeatedly to cycle through all of your input sources, including the DVD, VCR, Tuner (Ch##), Line 1 (front AV input), and Line 2 (rear AV input).



Basic DVD Playback

Follow these instructions to playback a DVD.

Open Disc Drawer

Press the Open/Close button on the remote control or front panel to automatically power on the DVD-VCR and open the disc drawer.





Insert Disc

Place the disc in the drawer with the label side of the disc facing up. If the disc has two sides, orient the disc with the desired label facing up.





Close Disc Drawer

Press the Open/Close button on the remote control or front panel to close the disc drawer.







4 Play the DVD

Press the Play/Pause button on the remote control or front panel.

- Many discs will begin playback automatically when the disc drawer closes.
- If the DVD has a disc menu, or more than one title, the disc menu may appear.





5 Additional DVD Options

- For advanced DVD Setup options, see Chapter 5.
- For Surround Sound Setup, see Chapter 6.
- For special DVD Playback features, see Chapter 7.

Basic VHS Playback

To play a videotape, simply insert it in the VHS deck and press the **Play** button. Tapes without Record Safety Tabs can be set to play automatically when inserted; see page 67.



Insert VHS Tape

Insert a standard VHS videotape into the VHS Deck.

 Power will turn on automatically when you insert a videotape.



Play Tape

Press the Play/Pause button on the remote control or front panel. If the tape is missing the Record Safety Tab and Auto Play is turned on, the tape will begin to play automatically, see page 67.





3 Stop Playback

Press the **Stop** button on the remote control or front panel.





4 Eject Tape

Press the Open/Close button on the remote control or the **Eject** button on the front panel.





Additional VCR Options

- For special VCR Playback features, see Chapter 8.
- For VCR Recording features, see Chapter 9.
- For Timer Recording features, see Chapter 10.
- For VCR Plus+ Recording features, see Chapter 11.

Basic TV Tuner Operations

The following buttons are used when watching television via the DVD-VCR's built-in TV tuner.

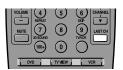
TV/VCR

Press to switch between your TV's tuner and the VCR's internal tuner.



Last Channel

Press to jump directly to the previously viewed channel.



Channel Up/Down

Press to change to the next or previous channel.



Volume/Mute

Press to adjust the volume of the program you are watching. Press Mute to toggle the sound on and off.

Also works in DVD and VCR



0-9 Buttons

Press to select channels directly.



Display

mode.

Press to display the channel you are watching.



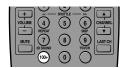
 Also works in DVD and VCR mode.



Ch 10

100+ Button

Press to select channels 100 and higher. First, press the 100+ button, then press the remaining digits using the 0-9 keys.



4 - System Setup

On-Screen Menu Navigation

The on-screen menu system allows you to set all functions for your DVD-VCR. The following keys are used to open and navigate through the on-screen menu system.

SETUP MENU

RETURN To Quit

The Setup Menu is the

opening screen of the on-

screen menu system

→ To Select

→ Set Timer Recording Child Lock

Set Clock

↑/↓ To Move

DVD Setup VCR & Channel Setup Language/Langue/Idioma

Setup Button

Press to access the DVD-VCR on-screen menu system.



Joystick Up/Down

Moves menu selection arrow up and down to cycle through menu options



Joystick Right

Selects or changes menu options.



Joystick Left

Moves backward through menu options on certain screens.



Enter Button

Press to confirm settings in certain menus.



Return Button

Returns to the last menu viewed or exits the menu system.



Clear Button

Clears Menu options on certain screens.



Front Panel Menu Buttons

The following front panel buttons can also be used to control the menu system:

- **Setup** (behind flap door) = Setup & Return
- Play/Pause = Joystick up
- Stop = Joystick down
- **Rewind** = Joystick left
- Fast-Forward = Joystick right



Menu Language

Follow these steps to change the on-screen menu language to English, French or Spanish.

1 Open "Setup Menu"

Press the **Setup** button.





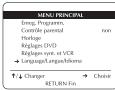
2 Set "Language/Langue/Idioma"

Using the joystick, move the selection arrow to "Language/Langue/Idioma," then push right repeatedly to translate the menu screen into English, French or Spanish.





English Setup Menu



French Setup Menu



Spanish Setup Menu

Manual Clock Set

If Auto Setup was unable to find a local TV station to set the DVD-VCR's internal clock, follow these instructions to set the date/time manually.

NOTE: It is important to set the clock for accurate Timer Recording and VCR Plus Recording.

1 Open "Setup Menu"

Press the **Setup** button.





2 Select "Set Clock"

Using the joystick, move the selection arrow to "Set Clock," then push right to select.





3 Turn Off "Auto Clock Set"

Move the selection arrow to "Auto Clock Set," then push right to turn this feature "Off."

• The "Set Clock Menu" will change as shown.





4 Select "Set Clock"

Move the selection arrow to "Set Clock," then push right to select.





5 Set the Clock

Push the joystick left/right to select each of the following options, then push up/down (or use the 0-9 keys) to set each option:

- Set Month Enter the month as a 2-digit number; i.e. for January, press "01".
- Set Year Enter the year as a 2-digit number; i.e. for 2000, press "00".
- Set Day Enter the day as a 2-digit number; i.e. for the ninth, press "09".
- Set Hour –Enter the hour as a 2-digit number; i.e. for 12:00, press "12".
- **Set Minute** –Enter the minute as a 2-digit number; i.e. for 00:25, press "25".
- Set AM/PM Enter 1 for AM and 2 for PM.





6 Confirm Settings

Press the **Return** button to save your clock settings and return to the Setup menu.

• Press Return again to exit.



Daylight Savings Time

You can set the DVD-VCR to adjust for Daylight Savings Time. Use this feature only if Auto Clock Set has incorrectly set the time. NOTE: If you are an Arizona resident, turn Daylight Savings Time off and choose Mountain Standard Time on page 20.

1 Open "Setup Menu"

Press the **Setup** button.

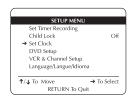




2 Select "Set Clock"

Using the joystick, move the selection arrow to "Set Clock," then push right to select.



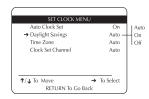


3 Set "Daylight Savings"

Move the selection arrow to "Daylight Savings," then push right to select from the following options:

- **Auto** Uses Auto Clock Set information to determine if your area adjusts for Daylight Savings Time.
- On The DVD-VCR's clock will adjust for Daylight Savings Time on the first Sunday in April and the last Sunday in October.
- Off No Daylight Savings Time adjustments will be made.





Time Zone

You can manually set the Time Zone for your region. Use this feature only if Auto Clock Set has incorrectly set the time by detecting a nearby time zone. NOTE: If you are an Arizona resident, choose Mountain Standard Time and turn Daylight Savings Time off.

7 Open "Setup Menu"

Press the **Setup** button.





2 Select "Set Clock"

Using the joystick, move the selection arrow to "Set Clock," then push right to select.





3 Turn On "Auto Clock Set"

Move the selection arrow to "Auto Clock Set," then push right to turn this feature "On."

• The "Set Clock Menu" will change as shown.



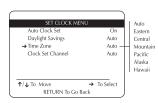


4 Set "Time Zone"

Move the selection arrow to "Time Zone," then push right to select from the following options:

- Auto Selects the Time Zone found during Auto Setup.
- Eastern Eastern Standard Time.
- Central Central Standard Time.
- Mountain Mountain Standard Time.
- Pacific Pacific Standard Time.
- Alaska Alaska Standard Time.
- Hawaii Hawaii Standard Time.





Auto Clock Set Channel

If you know a station in your area that broadcasts time information, you can set the Auto Clock Set Channel manually. For example, your local PBS station will usually transmit the time and date. Use this feature only if Auto Clock Set has set the time incorrectly.

1 Open "Setup Menu"

Press the **Setup** button.





2 Select "Set Clock"

Using the joystick, move the selection arrow to "Set Clock," then push right to select.





3 Turn On "Auto Clock Set"

Move the selection arrow to "Auto Clock Set," then push right to turn this feature "On."

• The "Set Clock Menu" will change as shown.





4 Set "Clock Set Channel"

Move the selection arrow to "Clock Set Channel," then push right to select from the following options:

- Auto Automatically seeks a station which broadcasts the time.
- Ch## Sets the DVD-VCR to search for a specific station. Use the 0-9 keys to set the channel.
- Line 1 Searches for the time from a device connected to the front Line 1 inputs.
- Line 2 Searches for the time from a device connected to the rear Line 2 inputs.





Tuner Band Setting

This feature allows you to manually set the DVD-VCR's tuner band to Antenna or Cable, whichever you connected to the Antenna In jack during initial setup.

• Use this setting only if Auto Setup detected the incorrect tuner band, i.e. channels are coming in on the wrong channel numbers.

Open "Setup Menu"

Press the **Setup** button.





2 Select "VCR & Channel Setup"

Using the joystick, move the selection arrow to "VCR & Channel Setup," then push right to select.

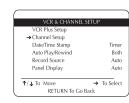




3 Select "Channel Setup"

Move the selection arrow to "Channel Setup," then push right to select.





4 Select "Tuner Band"

Move the selection arrow to "Tuner Band," then push right to select from the following options:

- Auto Automatically detects the Tuner Band.
- Antenna Indicates that the DVD-VCR is connected to an indoor or outdoor VHF/UHF antenna.
- Cable Indicates that the DVD-VCR is connected to either Community Antenna Television (i.e., cable TV without a cable box).





Auto Channel Search

Auto Channel Search will automatically seek and store all active channels in your area.

1 Open "Setup Menu"

Press the **Setup** button.





2 Select "VCR & Channel Setup"

Using the joystick, move the selection arrow to "VCR & Channel Setup," then push right to select.

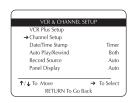




3 Select "Channel Setup"

Move the selection arrow to "Channel Setup," then push right to select.





4 Run "Auto Channel Search"

Move the selection arrow to "Auto Channel Search," then push right to select.

- The DVD-VCR will automatically search for all available channels in the selected Tuner Band. This procedure may take a few minutes to complete.
- When finished, the lowest channel found will be displayed.





Add/Remove Channels

Use this feature if Auto Channel Search missed a channel that you would like to add, or added a channel you wish to remove.

1 Open "Setup Menu"

Press the **Setup** button.





2 Select "VCR & Channel Setup"

Using the joystick, move the selection arrow to "VCR & Channel Setup," then push right to select.





3 Select "Channel Setup"

Move the selection arrow to "Channel Setup," then push right to select.





4 Select Channel to Add/Remove

Use the 0–9 keys to tune in the channel number you wish to add or remove.





5 Select "Add/Remove Channel"

Move the selection arrow to "Add/Remove Channel," then push right to add/remove the channel from your channel list.

 Repeat steps 4 and 5 to add or remove additional channels.





Show Weak Channels

The "Show Weak Channels" feature allows you to view channels with weak reception rather than substitute a blue screen.

1 Open "Setup Menu"

Press the **Setup** button.





2 Select "VCR & Channel Setup"

Using the joystick, move the selection arrow to "VCR & Channel Setup," then push right to select.





3 Select "Channel Setup"

Move the selection arrow to "Channel Setup," then push right to select.





4 Select "Show Weak Channels"

Move the selection arrow to "Show Weak Channels," then push right to select from the following options:

- **No** Channels with poor reception will be replaced by a blue screen.
- Yes Channels with poor reception will be displayed.





Tuner Audio

Today most television programs are broadcast in stereo. However, there are times you may wish to set the Tuner Audio to Mono, Stereo, SAP, or TV+SAP.

Display Tuner Audio Status

Press the **Audio** button while the TV View is set to the Tuner (i.e., you are watching TV).

• The current Tuner Audio status will appear in the upper right corner of the screen.





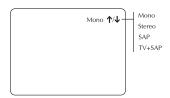
2 Select Tuner Audio

Push the joystick up/down to select from the following options, then press Enter to select:

- Mono Monaural (single-channel) audio. Combines the left and right audio signals into one channel. Use when connecting the VCR to a Mono output device, such as a monitor.
- Stereo Two-channel MTS stereo sound split into left and right channels. When a show is not broadcast in stereo, the sound reverts to Mono.
- SAP Second Audio Program. Optional audio signal, often used to transmit a second language, news, or weather broadcasts.
- TV+SAP Delivers Mono from the left channel and Second Audio Program (SAP) from the right channel. This is useful if you want to listen to a second language with headphones while the primary language is played through your TV speakers.

NOTE: Only audio selections which are available for the selected TV program will be displayed.





Child Lock

To prevent children from tampering with the DVD-VCR, Child Lock disables all front panel keys so the DVD-VCR can only be operated with the remote control.

1 Open the "Setup Menu"

Press the **Setup** button.





2 Select "Child Lock"

Using the joystick, move the selection arrow to "Child Lock," then push right to select from the following options:

- Off Child Lock is disabled. The front panel keys are fully functional.
- On Child Lock is enabled. The front panel keys are locked.

You will need the remote control to disable Child Lock and resume normal front panel operation.





Front Panel Dimmer

You can set the Front Panel Display to be bright all the time, dim all the time, dim between the hours of 10:00 p.m. and 6:00 a.m., or off.

Open "Setup Menu"

Press the **Setup** button.





Select "VCR & Channel Setup"

Using the joystick, move the selection arrow to "VCR & Channel Setup," then push right to select.





3 Set "Panel Display"

Move the selection arrow to "Panel Display," then push right to select from the following options:

- Auto Front Panel Display will dim automatically during DVD playback, and between 10:00 p.m. and 6:00 a.m.; otherwise, it will be bright.
- Bright Front Panel Display will be bright all the time.
- **Dim** Front Panel Display will be dim all the time.
- Off Front Panel Display will be off.





5 - DVD Setup

TV Aspect Ratio

Set the aspect ratio (length x width) of your TV screen so the DVD player will display movies at the appropriate size for your television. Choose from standard, letterbox, or widescreen format.

1 Open "Setup Menu"

Press the **Setup** button.





2 Select "DVD Setup"

Using the joystick, move the selection arrow to "DVD Setup," then push right to select.





3 Set "TV Aspect Ratio"

Move the selection arrow to "TV Aspect Ratio," then push right to select from the following options:

- 4:3PS 4:3 Pan & Scan. The familiar way of watching VHS movies, this method selectively crops (by panning and scanning to keep the most important part of the picture visible) wide screen movies to fit a standard 4:3 television screen.
- 4:3LB 4:3 Letterbox. This method displays the full width of the widescreen movie on a standard 4:3 television. As a result, black bars will appear at the top and bottom of the screen.
- 16:9 16:9 Widescreen. This method allows you to view the full 16:9 picture on a widescreen television.





Still Mode

The Still Mode feature lets you set the default method of freezing a single image on the screen during DVD playback.

How it Works

Because each frame of a standard NTSC video image is made up of two fields (odd and even scan lines), there are two ways to freeze an image during DVD playback:

- Frame Freezes both the odd and even scan lines that make up a single frame. Excellent for graphic detail, but may cause jitter in high motion scenes.
- Field Doubles either the odd or the even scan lines. Prevents jitter, but at the sacrifice of fine detail.

Open "Setup Menu"

Press the **Setup** button.





2 Select "DVD Setup"

Using the joystick, move the selection arrow to "DVD Setup," then push right to select.



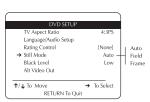


3 Set "Still Mode"

Move the selection arrow to "Still Mode," then push right to select from the following options:

- Auto Selects Still Mode automatically by detecting motion in the scene.
- Frame Select if you want to see fine text more clearly than in Auto mode.
- Field Select if the screen shakes in Auto mode.





Black Level

The Black Level feature adjusts the reference level of black in the video signal to one of two choices:

- High Standard NTSC black level. Yields consistent contrast through all sources.
- Low Enhanced black level. For increased contrast during DVD playback.

1 Open "Setup Menu"

Press the **Setup** button.





2 Select "DVD Setup"

Using the joystick, move the selection arrow to "DVD Setup," then push right to select.





3 Set "Black Level"

Move the selection arrow to "Black Level," then push right to select from the following options:

- High Standard NTSC reference Black Level for consistent brightness/contrast across all sources.
- **Low** Enhanced Black Level for increased brightness/contrast when viewing DVDs.





Audio Language

Follow these steps to choose your preferred language for DVD audio soundtracks. The DVD-VCR will automatically default to the language you choose if it is available on a given DVD.

Open "Setup Menu"

Press the **Setup** button.





Select "DVD Setup"

Using the joystick, move the selection arrow to "DVD Setup," then push right to select.





3 Select "Language/Audio Setup"

Move the selection arrow to "Language/Audio Setup," then push right to select.





4 Select "Audio"

Move the selection arrow to "Audio," then push right to select.





Set "Audio Language" Preference

Move the selection arrow to your preferred language for DVD audio soundtracks, then push Enter to select.







If you do not see the audio language that you wish, select "More..." to display additional choices.

Subtitle Language

Follow these steps to choose your preferred language for DVD subtitles. The DVD-VCR will automatically default to the language you choose if it is available on a given DVD.

1 Open "Setup Menu"

Press the **Setup** button.





2 Select "DVD Setup"

Using the joystick, move the selection arrow to "DVD Setup," then push right to select.





3 Select "Language/Audio Setup"

Move the selection arrow to "Language/Audio Setup," then push right to select.





4 Select "Subtitle"

Move the selection arrow to "Subtitle," then push right to select.





5 Set "Subtitle Language" Preference

Move the selection arrow to your preferred language for DVD subtitles, then push **Enter** to select.







If you do not see the subtitle language that you wish, select "More..." to display additional choices.

Disc Menu Language

Follow these steps to choose your preferred language for DVD disc menus. The DVD-VCR will automatically default to the language you choose if it is available on a given DVD.

1 Open "Setup Menu"

Press the **Setup** button.





2 Select "DVD Setup"

Using the joystick, move the selection arrow to "DVD Setup," then push right to select.

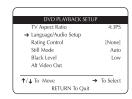




3 Select "Language/Audio Setup"

Move the selection arrow to "Language/Audio Setup," then push right to select.

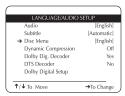




4 Select "Disc Menu"

Move the selection arrow to "Disc Menu," then push right to select.





5 Set "Disc Menu Language" Preference

Move the selection arrow to your preferred language for DVD disc menus, then push **Enter** to select.







If you do not see the Disc Menu language that you wish, select "More..." to display additional choices.

Dynamic Compression

Dynamic Compression constrains the dynamic range, i.e. the difference between the quietest and loudest passages of a DVD soundtrack. This enables you to limit loud noises, such as explosions, or raise the volume of quiet passages, such as whispering, while watching a movie. This is convenient for viewing movies late at night.

1 Open "Setup Menu"

Press the **Setup** button.





2 Select "DVD Setup"

Using the joystick, move the selection arrow to "DVD Setup," then push right to select.





3 Select "Language/Audio Setup"

Move the selection arrow to "Language/Audio Setup," then push right to select.





4 Set "Dynamic Compression"

Move the selection arrow to "Dynamic Compression," then push right to select from the following options:

- On The total dynamic range of the DVD soundtrack will be compressed, so quiet passages will be louder and loud passages will be softer.
- Off The original dynamic range will be preserved.





Rating Control Settings

Rating Control is a password protected system that allows you to block playback of DVDs based on their content. The system uses an eight level rating system.

- If you try to play a DVD that exceeds the selected rating, an error message will appear.
- Not all discs are rated.

Open "Setup Menu"

Press the **Setup** button.





2 Select "DVD Setup"

Using the joystick, move the selection arrow to "DVD Setup," then push right to select.





3 Select "Rating Control"

Move the selection arrow to "Rating Control," then push right to select.





4 Select "Require Password"

Move the selection arrow to "Require Password," then push right to select from the following options:

- No Indicates that no password is required to view any DVD disc or to change Rating Control options. No additional Rating Control settings are necessary.
- Yes Indicates that a password is required to view some DVD discs and to view Rating Control options. The menu will change as shown.





NOTES:

- The first time "Require Password" is set to "Yes," you will be prompted to enter a new password.
- If the "Enter Password" screen appears, then "Require Password" has already been set to "Yes." Please skip to Step 5.

5 Enter Password

Enter a 4-digit password using the 0–9 keys on the remote control.

 Write your password down, and keep it in a safe place in case you need it to change your settings later.





6 Select "Change Rating Level"

Move the selection arrow to "Change Rating Level," then push right to select.





7 Change Rating Level

Use the joystick to select one of the following ratings:

- Level 1 (G)
- Level 5

Level 2

- Level 6 (R)
- Level 3 (PG)
- Level 7 (NC-17)
- Level 4 (PG-13)
- Level 8





All ratings above the level you select will also be blocked, e.g., if you block Level 6, then Levels 7 and 8 will also be blocked. Press **Enter** to confirm your selection.

Changing the Rating Control Password

Follow these instructions to change the Rating Control password.

Select "Changing Password"

Use the joystick to select "Changing Password" from the "Rating Control" menu.





Enter New Password

Enter a new 4-digit password using the 0-9 keys on the remote control.





3 Re-enter Password

Enter the same 4-digit password using the 0–9 keys on the remote control to confirm your password.





Confirm New Password

After you re-enter the password, a menu will appear to indicate whether or not the password has been successfully changed. Press the **Return** button to continue.

• Press the **Return** button repeatedly to exit the menu system.





A/V Receiver Connections

To take full advantage of the movie theater experience that DVD offers, you may want to connect your DVD-VCR to a complete Surround Sound system, including an A/V Receiver and six Surround Sound speakers. Choose either the analog or digital connection, depending on whether or not your A/V receiver is equipped with a Dolby Digital Decoder.

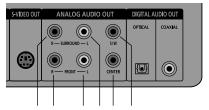
Before You Begin...

- If your A/V receiver is NOT equipped with a Dolby Digital Decoder, you will want to use the DVD-VCR's built-in Dolby Digital Decoder. Use the **Analog Audio Out** connection below.
- If your A/V receiver IS equipped with a Dolby Digital Decoder, you have the option to bypass the DVD-VCR's built-in Dolby Digital Decoder. Use the **Digital Audio Out** connection below.

1 Analog Audio Out

Connect six standard RCA cables from the Analog Audio Out jacks on the back panel of the DVD-VCR to their corresponding 5.1 channel input jacks on your A/V Receiver:

- Surround Right/Left
- · Rear Right/Left
- Subwoofer
- Center



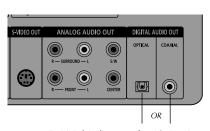
To 5.1 Channel Input of an A/V Receiver without a Dolby Digital Decoder

2 Digital Audio Out

Connect EITHER an optical cable OR a digital coaxial cable from the Digital Audio Out jacks on the back panel of the DVD-VCR to their corresponding Digital Audio Input jacks on your A/V Receiver:

Optical
 Coaxial
 Use whichever connection is available on your A/V Receiver.

Proceed to "Dolby Digital Decoder Setting" on page 40.



To Digital Audio Input of an A/V Receiver with a Dolby Digital Decoder

Dolby Digital Decoder Setting

If your A/V receiver is equipped with a Dolby Digital decoder, your DVD-VCR can output Dolby Digital 5.1 sound, but you MUST enable this feature in the menu system to prevent damage to your speakers.

NOTE: Select "Yes" ONLY if you have connected a Dolby Digital-equipped A/V receiver to the Digital Output (optical or coaxial) on the DVD-VCR back panel.

Open "Setup Menu"

Press the **Setup** button.





Select "DVD Setup"

Using the joystick, move the selection arrow to "DVD Setup," then push right to select.

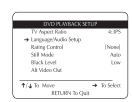




3 Select "Language/Audio Setup"

Move the selection arrow to "Language/Audio Setup," then push right to select.





4 Set "Dolby Dig. Decoder"

Move the selection arrow to "Dolby Dig. Decoder," then push right to select from the following options:

- Yes Indicates that your A/V receiver is equipped with a Dolby Digital decoder.
- No Indicates that your A/V receiver is NOT equipped with a Dolby Digital decoder.





DTS Decoder Setting

If your A/V receiver is equipped with a DTS decoder, your DVD-VCR can output DTS digital sound, but you MUST enable this feature in the menu system.

NOTE: Select "Yes" ONLY if you have connected a DTS-equipped A/V receiver to the Digital Output (optical or coaxial) on the DVD-VCR back panel.

7 Open "Setup Menu"

Press the **Setup** button.





2 Select "DVD Setup"

Using the joystick, move the selection arrow to "DVD Setup," then push right to select.

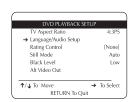




3 Select "Language/Audio Setup"

Move the selection arrow to "Language/Audio Setup," then push right to select.





4 Set "DTS Decoder"

Move the selection arrow to "DTS Decoder," then push right to select from the following options:

- No Indicates that your A/V receiver is NOT equipped with a DTS decoder.
- Yes Indicates that your A/V receiver is equipped with a DTS decoder.





Speaker Setup Overview

The Speaker Setup menus allow you to customize the **DVD-VCR** for your surround sound setup, including speaker sizes, channel delays and channel levels. For proper audio performance, you must set up the system to match your speaker configuration.

Speaker Placement

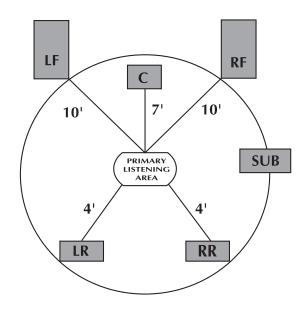
Position your speakers as shown in the diagram. The six speakers should surround your primary listening area.

- LF/RF (Left Front/Right Front) Usually the largest speakers in the room. Used for primary action.
- C (Center) Often used for dialog.
- **SUB** (Subwoofer) For low frequency effects. Low frequencies are non-directional, so this speaker can be placed nearly anywhere in the vicinity of your listening area.
- LR/RR (Left Rear/Right Rear Speakers) Also called Surround Speakers, used for ambient noise and special effects.

Speaker Size

For optimal audio performance, specify the relative size of your Front, Center, and Rear Speakers. If you do not connect Center or Rear speakers, make sure to set these to "None." For Subwoofer, simply select "Yes" or "No."

- Front Speakers Select Large or Small; see page 45.
- Center Speaker Select Large, Small or None; see page 46.
- Rear Speakers Select Small, Large, None; see page 47.
- Subwoofer Select Yes or No; see page 45.



Speaker Placement Diagram

Setting Levels

Level is a fancy term for volume. You can change the level of your Center Speaker, Rear Speakers, and Subwoofer relative to your Front Speakers in 1db (decibel) increments from 0 to -6.

- Subwoofer Select from 0 to -6dB; see page 45.
- Center Speaker Select from 0 to -6dB; see page 46.
- Right/Left Rear Speakers Select from 0 to -6dB; see page 47.

Channel Delays

Ideally all of your speakers will be the same distance from your primary listening area. If not, you can set Channel Delays for your center and surround speakers so all audio signals arrive at the same time. Assume 1 mS (millisecond) of delay for every 1 foot of distance relative to your front speakers.

- Center Speaker Select 0-5mS; see page 46.
- Rear Speakers Select 0-15mS; see page 47.

NOTE: See sidebar to calculate delays.

Speaker Test

The Speaker Test feature allows you to check your levels using a white noise signal as a neutral reference; see page 48.

Calculating Channel Delays

- Measure the distance from your primary listening area to your Front Speakers; e.g. 10 feet. Use this as your reference distance.
- 2. Now measure the distance from the primary listening area to your Center Speaker; e.g. 7 feet.
- Calculate the difference between these two distances;
 e.g. 10 feet minus 7 feet = 3 feet.
- **4.** Assume 1 ms of delay for each 1 foot of difference, e.g. set the Center Delay to 3 ms.
- Repeat steps 2–4 for the Surround Speakers; e.g. 10 feet minus 4 feet = 6 feet, or 6 ms delay.

NOTE: If the Center or Surround distance is equal to or greater than the reference distance, set the delay to 0 ms.

Front Speaker/Subwoofer Settings

Follow these steps to set the size of your front speakers and the level of your subwoofer (if applicable).

Open "Setup Menu"

Press the **Setup** button.





Select "DVD Setup"

Using the joystick, move the selection arrow to "DVD Setup," then push right to select.





3 Select "Language/Audio Setup"

Move the selection arrow to "Language/Audio Setup," then push right to select.





4 Select "Dolby Digital Setup"

Move the selection arrow to "Dolby Digital Setup," then push right to select.





5 Set "Front Speakers"

Move the selection arrow to "Front Speakers," then push right to select from the following options:

- Large Select if the Front Speakers have a low frequency of 100Hz or below. If you do not connect a subwoofer, always set the Front Speakers to Large.
- **Small** Select if the Front Speakers have a low frequency above 100Hz.





6 Set "Subwoofer Connected"

Move the selection arrow to "Subwoofer Connected," then push right to select from the following options:

- Yes If you have connected a subwoofer.
- No If you have NOT connected a subwoofer.



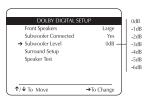


7 Set "Subwoofer Level"

Move the selection arrow to "Subwoofer Level," then push right to select from the following options:

 OdB to - 6dB - Indicates the relative difference in loudness between your front speakers and your subwoofer, in 1dB increments.





Please continue with "Center/Rear Speaker Settings" on the following page...

Center/Rear Speaker Settings

Follow these steps to set the size, delay, and level of your center and rear speakers (if applicable).

1 Select "Surround Setup"

From the "Dolby Digital Setup" menu, move the selection arrow to "Surround Setup," then push right to select.





2 Set "Center Speaker"

Move the selection arrow to "Center Speaker," then push right to select from the following options:

- Large Indicates that your Center Speaker is large.
- Small Indicates that your Center Speaker is small.
- None Indicates that you do not have a Center Speaker.





3 Set "Center Delay"

Move the selection arrow to "Center Delay," then push right to select from the following options:

 0mS - 5mS - Indicates the relative delay between your Front Speakers and your Center Speaker.



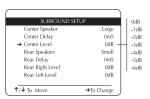


4 Set "Center Level"

Move the selection arrow to "Center Level," then push right to select from the following options:

 OdB to - 6dB - Indicates the incremental difference in loudness between your Front Speakers and your Center Speaker.





5 Set "Rear Speakers"

Move the selection arrow to "Rear Speakers," then push right to select from the following options:

- Small Indicates that your Rear Speakers are small.
- Large -Indicates that your Rear Speakers are large.
- None Indicates that you do not have Rear Speakers.





6 Set "Rear Delay"

Move the selection arrow to "Rear Delay," then push right to select from the following options:

• **0mS - 15mS** - Indicates the relative delay between your Front Speakers and your Rear Speakers.





7 Set Rear Levels

Move the selection arrow to "Rear Left Level" or Rear Right Level," then push right to select from the following options:

 OdB to - 6dB - Indicates the incremental difference in loudness between your Front Speakers and your Right Rear or Left Rear Speaker.

Please continue with "Testing Your Speaker Levels" on the following page...





Testing Your Speaker Levels

Now that you have connected your speakers and made all adjustments, you can check your work with the built-in Speaker Test. The Speaker Test will play a white noise signal for 5 seconds in every speaker so you can go back and make fine adjustments to the levels for your Center Speaker, Rear Speakers, and Subwoofer.

Select "Speaker Test"

From the "Dolby Digital Setup" menu, move the selection arrow to "Speaker Test," then push right to select.





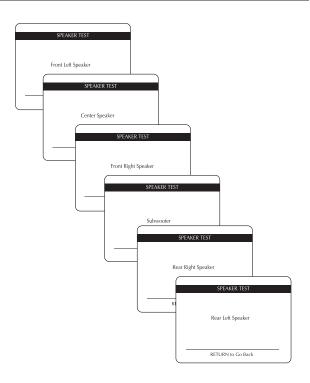
7 Test Speaker Levels

The DVD-VCR will loop playback white noise in each speaker for 5 seconds in the following order:

- 1. Front Left
- 2. Center
- 3. Front Right
- 4. Subwoofer
- 5. Right Rear
- 6. Left Rear

Listen carefully to the relative loudness of each speaker. Ideally, the relative loudness of each speaker will be the same when you are in your primary listening area.

- To adjust the level of a particular speaker, repeat the steps on pages 44-47.
- To exit the Speaker Test, press the **Return** button.



7 - DVD Operations

Special Playback Features

During DVD/CD playback you can select from the following special playback options. To resume normal playback, press the Play/Pause button.

Freeze

Press the **Play/Pause** button on the remote control during playback.

- The picture will freeze and the audio will mute.
- To resume playback, press the **Play/Pause** button.
- If the player is left in Freeze mode for 2 minutes, it will stop automatically.



Frame Advance

While in Freeze mode, press the Frame/Step button on the remote control to advance one frame at a time.

- Audio is muted during Frame Advance mode.
- Press Play/Pause to resume normal playback.

NOTE: Frame Advance operates only in the forward direction.



Skip Forward/Back

While a CD or DVD disc is in Play mode, press the Skip Forward/ Back buttons on the remote control or front panel to jump forward and backward through disc chapters/tracks.

- **Skip Forward** will jump to the next chapter/track.
- Skip Back will jump to the beginning of the current chapter/track.
- Press Skip Back again to jump to the beginning of the previous chapter/track.



Search Forward/Back

While a disc is in Play mode, press the **Search Forward/Back** buttons on the remote control to visually search forward and backward at variable speeds:

- Each press increases or decreases the speed from normal playback to 2X - 4X - 8X - 16X - 32X. Press Play to resume normal speed.
- Front Panel Search Keys Press and hold the Forward/Back buttons on the front panel to visually search forward/backward at 2x - 4X - 8X - 16X - 32X speed. Release the Forward/Back button to resume normal speed.



Slow Motion

During playback, press the Play/Pause button to Freeze the image. Then use the **Search Forward/Back** buttons to play in slow motion at variable speeds.

- Each press increases or decreases the speed from normal playback to 1/8 speed to 1/4 speed to 1/2 speed.
- Audio is muted during slow motion playback.
- Press the Play/Pause button to resume normal playback.
- Front Panel Slow Motion Keys Press and hold the Forward/Back buttons on the front panel to activate slow motion playback. Release button to resume normal speed.



Stop/Resume

- Press the **Stop** button once to stop playback. To resume the movie/ CD from the point where the disc stopped, press the Play/Pause button.
- Press the **Stop** button twice to completely stop playback. The next time you press Play/Pause, the disc will start over from the beginning.



Disc Menu Navigation

Many DVDs feature their own menu systems, where you can select Titles, Chapters, Audio Tracks, Subtitles, and special disc features, such as movie trailers, and information on the cast. Use these buttons to make selections in the Disc menus.

Menu Button

Press to access the DVD's Disc menu, if applicable.



Joystick

Use to navigate through DVD's Disc menu options.

• Push up, down, left and right to highlight menu choices.



Enter Button

Press to make your selections in the Disc menu.



Title Button

Press to access the DVD's Title menu, if applicable.



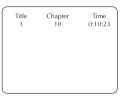
Title/Chapter/Time Selection

If you press the Display button during DVD playback, you can view the current Title, Chapter/ Track, and counter position. You can also use this screen as shortcut to select any Title, Chapter/Track, or counter position on the disc.

View DVD/CD Display

Press the **Display** button on the remote control during DVD/CD playback.



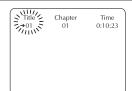


Select Title

Push the joystick left/right to select Title, then push up/ down to change among all available titles on the disc.

 The "T" icon will light on the Front Panel Display, followed by the current title number, hours, minutes, and seconds.





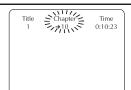


Select Chapter or Track

Push the joystick left/right to select Chapter or Track, then push up/down to change among all available Chapters/Tracks on the disc.

• The "T" icon will light on the Front Panel Display, followed by the current title number, hours, minutes, and seconds.



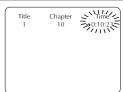




Select Counter Position

Push the joystick left/right to select the counter position indicator, then use the number keys (0-9) to enter the desired counter position in the format HH:MM:SS (H = Hours, M = Minutes, S = Seconds).





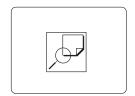
Zoom

You can zoom in at 2 or 4 times the normal magnification while watching a DVD, and 2 times while watching a VCD.

1 Open Zoom Magnifying Glass

During Playback or Pause mode, press the **Zoom** button to display the "Magnifying Glass icon" on the screen.

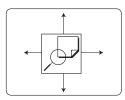




2 Position Magnifying Glass

Use the joystick to move the magnifying glass to any position on the screen you want to zoom.

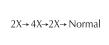




3 Zoom In

Press the **Enter** button repeatedly to zoom in at 2X - 4X - 2X - and normal magnification.



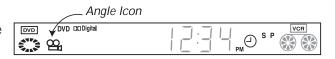


Angle

Some DVDs allow you to view the same scene from different perspectives, or angles, while watching a movie. Press the **Angle** button to activate this feature.

Check for Angle Marker

If multiple Angles are available on the DVD, the Angle mark will appear on the front panel display during playback.



2 View Angle Options

If the Angle mark is present, press the Angle button to view the Angle Selection menu.





3 Select Screen Angle

Push the joystick up/down to select one of the available screen angles.



```
Angle ↑/↓
1/3
2/3
3/3
```

Subtitle

Many DVDs provide subtitles in one or more languages. The **Subtitle** button provides a shortcut to view and select these options.

1 Open Subtitle Menu

During playback, press the **Subtitle** button.



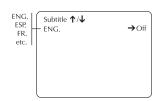


2 Set Subtitle Language

Push the joystick up/down to select among all available subtitle languages.

• Subtitle languages are often represented by abbreviations; i.e. "ESP" for "español."





3 Activate Subtitles

Push the joystick left/right to turn subtitles On or Off.

- The default subtitle setting is Off.
- Press the **Enter** button to confirm your selection.





A-B Repeat

The A-B Repeat function allows you to repeat any segment of a DVD or CD over and over again. Simply mark the beginning point (A) and the ending point (B) of the segment you want to review.

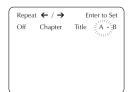
Select A-B Repeat Function

In Play mode, press the A-B button, then push the joystick left/right to select A-B Repeat.

• "A-" will blink when A-B Repeat is selected.

NOTE: If you are playing a CD, the menu will display "Track" in place of "Chapter"





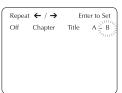
2 Mark the Starting Point

Press the **Enter** button at the beginning of the segment you want to repeat (Point A).

• "B" will blink after Point A is selected.

NOTE: The minimum AB Repeat time is 5 seconds.



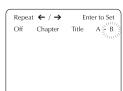


4 Mark the Ending Point

Press the **Enter** button again at the end of the segment you want to repeat (Point B).

• The segment will begin repeating in a continuous loop.





5 Cancel A-B Repeat

Press the A-B button to open the Repeat Menu, push the joystick left/right to highlight "Off," then press the **Enter** button.





Repeat Chapter/Title

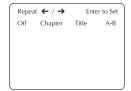
You can repeat a single chapter over and over, or repeat a complete title.

7 Open Repeat Menu

In Play mode, press the **Repeat** button to open the Repeat menu.

• The current Repeat Mode will blink.



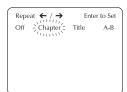


2 Select "Chapter"

Push the joystick left/right to select "Chapter".

"Chapter" will blink when Chapter Repeat is selected.





3 Repeat Chapter

Press the **Enter** button to repeat the current chapter/ track.

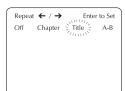


4 Select "Title"

Push the joystick left/right to select "Title".

• "Title" will blink when Title Repeat is selected.





5 Repeat Title

Press the Enter button to repeat the title.



Audio

Many DVDs provide multiple language and audio setup options, such as Dolby Digital 5.1, Dolby Pro Logic, or LPCM 2 Channel audio. The Audio button provides a shortcut to view and select among all available options for a given disc.

Open the Audio Menu

During playback, press the Audio button on the remote control.



Audio ↑/↓ English LPCM 2CH

Select DVD Audio Track

Push the joystick up/down to select the desired language/audio setup on the DVD.

• Languages are represented by abbreviations; i.e. "ESP" for "español."



Audio ↑/↓ English LPCM 2CH

Bookmarks

You can insert up to three Bookmarks on your DVDs, so you can jump quickly to your favorite scene or song.

1 Open Bookmark Menu

During playback, press the **Mark** button on the remote control. The "Mark" header will appear on the screen.





2 Select Bookmark Placeholder

Push the joystick left/right to move to one of the three bookmark placeholders (- - -).

• The selected placeholder will blink.





3 Set the Bookmark

Play the DVD to the scene you want to bookmark, then press the **Enter** button. The placeholder will change to a number (1, 2 or 3).

- You can continue setting up to three bookmarks.
- When finished, press the **Mark** button to exit.





4 Play Bookmark

- During playback, press the **Mark** button on the remote control.
- Push the joystick left/right to move to a previously set bookmark.
- Press the **Play/Pause** button to play the bookmark.
- Press the Clear button to cancel the bookmark.
- Press the Mark button again to exit the Bookmark menu.





Programmed Playback

Programmed Playback lets you set a custom order for playback of chapters/tracks on a DVD or CD.

Open "Playback Mode" Menu

While in Stop mode, press the Mode button.





Select "Programmed Play"

Using the joystick, move the selection arrow to "Programmed Play," then push right to select.

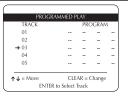




3 Select Chapter/Track

Push the joystick up/down to select the first chapter/ track in your revised playback list, then press the Enter button.





Program Playback Order

Use the joystick to select the remaining chapters/tracks, pressing Enter after each.

• Press the Clear button to change selections.





5 Play Revised Order

Press the Play/Pause button. The disc will play back in the custom programmed order.

• While in Play mode, press the Clear button on the remote control to cancel Programmed Play.



Random Playback

DVD Random Playback lets the DVD-VCR set a random order for playback of chapters/ tracks on a DVD or CD.

Open Playback Mode Menu

In Stop mode, press the **Mode** button.





2 Select Random Play

Using the joystick, move the selection arrow to "Random Play," then push right to select.

• The disc will playback automatically in random order.





3 Cancel Random Play

Press the Clear button on the remote control to cancel Random Play.



MP3 Playback

MP3 is a popular music format which allows you to compress music files up to 1/12 of their original size while retaining near CD quality sound. Your DVD-VCR can playback MP3 files burned onto a CD-R disc.

Insert Disc

Insert a CD-R with MP3 files into the DVD deck.

• The MP3 main menu will appear after a few seconds and the first song on the disc will begin playing.

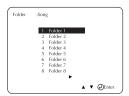


Select Folder

Push the joystick up/down to select the folder on the CD-R which contains the MP3 files you want to hear, then press **Enter** to select.

- If there are more than 8 folders on the disc, push the joystick left/right to view additional folders.
- If there are no folders on the CD-R, skip to Step 3.





3 Select MP3 File

Push the joystick up/down to select the desired MP3 file.

- If there are more than 8 MP3 files in the selected folder, push the joystick left/right to view additional MP3 files.
- File names are truncated to eight characters: the first six characters of the song, plus an asterisk (*), then a number.
- Press the **Return** button to back up and select another folder.





4 Play MP3 File

Press either the **Enter** button on the remote control to play the selected song.

• While the song is playing, you can use the joystick to browse through other folders.





5 Stop MP3 Selection

Press the **Stop** button on the remote control to stop playback.



3D Sound

3D Audio is an enhanced audio mode that creates the illusion of Surround Sound with only two speakers.

1 Open 3D Sound Menu

During playback of a DVD, press the 3D Sound button on the remote control.

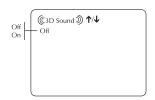




2 Set 3D Sound

Push the joystick up/down to set "3D Sound" On or Off, then push the 3D Sound button to confirm your selection.





8 - VCR Playback

Special Playback Features

While a videotape is playing, you can enjoy a variety of special playback features, including Freeze, Frame Advance, Skip, Repeat, and more. Press the Play button again to resume normal playback.



Press the Display button to see the current status of the VCR deck, as well as the tape counter position and record speed.

Freeze

From Play mode, press **Play/ Pause** to freeze a single frame.



Frame Advance

From Freeze mode, press Frame/Step to advance to the next frame.



Cue/Review

From Play mode, press **F.Forward** or **Rewind** to cue/ review at two speeds:

- Picture Search Press and release to advance the tape forward or backward at 5 times normal speed.
- Jet Search Press and hold to advance the tape forward or backward at 7 times normal speed.



From Play mode, press **Skip** to cue ahead exactly 1 minute. Press **Skip** repeatedly up to 5 times to cue ahead 1-5 minutes.



Repeat

From Play mode, press **Repeat** to review the last 30 seconds of tape.



Shuttle

From Play mode, Shuttle >> gradually increases the cue speed from Double-Speed playback to Picture Search to Jet Search. Shuttle << gradually slows down the tape, then goes into Still mode, Reverse Picture Search and Reverse Jet Search.



Tracking

The Tracking adjustment removes the white lines that sometimes appear during playback because of slight differences in recording decks. The ATR button (Auto Tracking) will automatically align the recorded tracks with the playback heads to solve this problem. You may also set tracking manually.

1 Adjust Tracking Manually

During playback, press the TRK- or TRK + buttons to move the white lines out of the picture.



2 Resume Auto Tracking

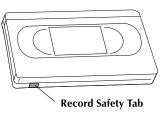
Press the ATR button to have the VCR adjust tracking automatically.



Auto Play/Rewind

If you want your videotapes to play automatically when you insert them, turn on Auto Play. If you want videotapes to rewind automatically when they are done playing, turn on Auto Rewind.

NOTE: Only tapes that are missing the Record Safety Tab will play automatically when inserted.



Open the "Setup Menu"

Press the **Setup** button.





Select "VCR & Channel Setup"

Using the joystick, move the selection arrow to "VCR & Channel Setup," then push right to select.





Select "Auto Play/Rewind

Move the selection arrow to "Auto Play/Rewind," then push right to select from the following options:

- Both Enables both Auto Play and Auto Rewind.
- Play Enables Auto Play only. Tapes without Record Safety Tabs will play automatically when you insert them.
- Rew Enables Auto Rewind only. Tapes will rewind automatically when they are done playing.
- None Disables both Auto Play and Auto Rewind.





S-VHS Playback

The DVD-VCR allows you to playback high quality S-VHS tapes. Press the S-VHS button during playback to enable this feature.

Insert S-VHS Tape

Insert an S-VHS tape into the VCR deck.



2 Start Playback

Press Play/Pause on the remote control to begin playback of the S-VHS tape.



3 Enable S-VHS Playback

Press the **S-VHS** button on the remote control.



9 - VCR Recording

Basic Recording

You can record a TV show in progress by inserting a blank tape and pressing the Record button. You can even add time in fixed 30-minute increments by pressing the Record button repeatedly; see page 71.



NOTE: Be sure you videotape has a Record Safety Tab. If the tab is missing, you can cover the opening with a small piece of tape. Warning: Do not cover this opening unless you are sure you want to record over the tape.

Before You Begin...

- Power on the DVD-VCR
- Power on the TV
- Set the TV to channel 3 or 4 (whichever the switch is set to on the back of the DVD-VCR).

Insert Tape

Insert a blank VHS tape into the VCR deck.

• Make sure the tape is long enough to record the entire program. To change the Recording Speed, see page 72.



2 Select a Channel to Record

Use the **0–9** buttons or the **Channel Up/Down** arrow keys to select the desired channel, or press the TV View button to select Line 1 or Line 2 if recording from an external device connected to the front or rear Line inputs, respectively.



3 Start Recording

Press the **Record** button on the remote control or front panel. For options while recording is in progress, see "Special Recording Features" on the next page.





Special Recording Features

While a recording is in progress, you can watch a different channel, watch a DVD, or add recording time in 30-minute increments.

1 Pause/Resume Recording

Press the **Play/Pause** button. Press **Record** again to resume.



2 Stop Recording

Press the **Stop** button.



3 Watch a Different Channel

Press the **TV/VCR** button on the remote or front panel to switch to your TV tuner, then select a different channel on your television.



4 To Watch a DVD

Insert a DVD in the DVD deck and press **Play**. The TV View will automatically change to the DVD.



5 Add Recording Time

See One-Touch Recording (OTR) on the next page.

One-Touch Recording (OTR)

One-Touch Recording (OTR) allows you to add recording time in 30-minute increments up to 9:30 minutes at the touch of a button.

1 Start Recording

Follow the instructions on page 69 to begin recording.

2 Activate OTR

While in Record mode, press the **Record** button again to activate One-Touch Recording (OTR).

• OTR 0:30 appears on the On-Screen Display and the DVD-VCR will record for exactly 30 minutes.





3 Add Recording Time

Continue pressing **Record** to add recording time in 30 minute increments up to 9 hours and 30 minutes.



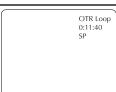


4 Activate Loop Record

When you reach OTR 9:30, press **Record** again to enter Loop Record mode. The DVD-VCR will record the entire videotape over and over in a continuous loop until you press **Stop**. This can be used for continuous recording of security cameras.

- If you press Power during OTR, the DVD-VCR will turn off automatically when the recording time has elapsed.
- The DVD-VCR stops recording automatically when the time has elapsed.





Record Speed

You can slow down the recording speed from SP to SLP in order to fit six hours of programming on a T-120 tape.

Start Recording

Follow the Basic Recording instructions on page 69.

2 Set Record Speed

Press the SP/SLP button on the remote control to set the Record Speed to one of the following options:

- SP Standard Play, for best quality.
- SLP Super Long Play, for maximum recording time (3 times SP).

NOTE: The selected Record Speed will appear on the front



DVD	DVD DDDigital	VCR
STATE OF		S P
	DVD	

Maximum R	Maximum Recording Time - SP vs. SLP						
Tape Length	SP (Standard Play)	SLP (Super Long Play)					
T-120	2 hrs	6 hrs					
T-160	2 hrs 40 mins	8 hrs					
T-180	3 hrs	9 hrs					

Record Source

You can set the DVD-VCR to record from a variety of sources, including the Tuner, DVD deck, Line 1 (front) input, or Line 2 (rear) input. The Auto setting will record whatever is currently visible on-screen, as set by the TV View button.

Open the "Setup Menu"

Press the **Setup** button on the remote control. The "Setup Menu" appears.





2 Select "VCR & Channel Setup"

Using the joystick, move the selection arrow to "VCR & Channel Setup," then push right to select.





3 Set "Record Source"

Move the selection arrow to "Record Source," then push right to select from the following options. The VCR will record from:

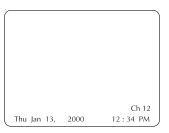
- Auto Whatever is currently visible on screen.
- **Tuner** The VCR's built-in television tuner.
- Line 1 An external source, such as a camcorder, connected to the front line inputs.
- Line 2 An external source, such as a Satellite receiver, connected to the rear line inputs.
- **DVD** A DVD playing in the DVD deck.





Date/Time Stamp

The Date/Time Stamp allows you to overlay the date, time, and record source at the beginning of your recordings. You can choose to record the Date/Time Stamp on every recording or on timer recordings only.



Sample Date/Time Stamp

Open the "Setup Menu"

Press the **Setup** button on the remote control. The "Setup Menu" appears.





2 Select "VCR & Channel Setup"

Using the joystick, move the selection arrow to "VCR & Channel Setup," then push right to select.





Set "Date/Time Stamp"

Move the selection arrow to "Date/Time Stamp," then push right to select from the following options. The Date/Time Stamp will be recorded on:

- Timer Timer recordings only (default setting).
- **All** All recordings.
- Off No recordings.





Copying from DVD To VHS

The DVD-VCR allows you to copy the contents of a DVD to a VHS tape with a press of the Copy button.

If the DVD you are attempting to copy is copy protected, you will not be able to copy the disc. It is not permitted to copy Macrovision® encoded DVDs.

Insert Disc

Insert the disc you wish to copy in the DVD deck and close the drawer.



Insert VHS Tape

Insert a blank VHS videotape into the VCR deck.



? Copy the DVD to VHS Tape

Press the **Copy** button on the DVD-VCR front panel.

- The DVD will go into Play mode and the VCR will go into Record mode.
- If the DVD disc menu appears, you may need to press the Play button manually to begin copying.



4 Stop the Copy Process

When the DVD is finished playing, press the VCR button on the remote control and then press the Stop button to end the copy.

• You must stop the Copy process manually when the DVD movie ends, or the DVD may replay and record over and over again.



10 - Timer Recording

How to Set a Timer Recording

The Timer Recording Feature allows you to program up to 16 events at a time to record up to a year in advance.

Before You Begin...

- Power on the DVD-VCR
- Power on the TV
- Set the TV to channel 3 or 4 (whichever the switch is set to on the back of the DVD-VCR).
- Insert a blank tape with a Record Safety Tab into the VCR deck.

Open "Setup Menu"

Press the **Setup** button.





Select "Set Timer Recording"

Using the joystick, move the selection arrow to "Set Timer Recording," then push right to select.





3 Select Event Number

Move the selection arrow to any available event number (01-16), then push right to select.





4 Set Event Date and Time

Use the number keys or joystick to set the date and time of the event. To leave an entry unchanged, push the joystick to the right. The player will not allow you to enter an invalid number. The default setting is the current date and time.

- Set Month Enter the month as a 2-digit number; i.e. for January, press "01".
- Set Day Enter the day as a 2-digit number; i.e. for the ninth, press "09".
- **Set Hour** –Enter the hour as a 2-digit number; i.e. for 12:00, press "12".
- **Set Minute** –Enter the minute as a 2-digit number; i.e. for 00:25, press "25".
- Set AM/PM Enter 1 for AM and 2 for PM.



		CET	MON	TU [1	- 12] :0:		
	Aug		98		PM	1H00	DM
	Su	Мо	Tu	We	Thu	Fr	Sa
							1
	2	3	4	5	6	7	8
	9	10	11	12	13	14	15
	16	17	18	19	20	21	22
	23	24	25	26	27	28	29
	30	31					
1-	Time		Cl	h 10		A	uto

| Set Month (1-12) Set Day (1-31) Set Hour (1-12) Set Minute (00-59) Set AM/PM (1/2)

5 Set Event Length

Use the number keys to set the length of the event in hours and minutes. The default setting is 0 hours and 30 minutes.

- Set Length (H) Enter the hours as a 2-digit number; i.e. for 1 hour, press "01".
- Set Length (M) Enter the minutes as a 2-digit number; i.e. for 30 minutes, press "30".



	SET	LENG"	ſΗ (H) (0-9) :00) —	
Aug	1	998	10:3	0PM	1H0	MC
Su	Mo	Tu	We	Thu	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					
1= 1	ime	(H10		Au	to

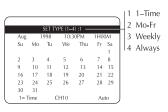
Length (H) (0-9) Length (M) (01-59)

6 Set Event Type

Use the number keys (1–4) to set the type of event, i.e. how often the event will be recorded. The default setting is "1-Time".

- 1 1-Time The event will be recorded only once.
- 2 Monday-Friday The event will be recorded every weekday.
- 3 Weekly The event will be recorded once a week.
- 4 Always The event will be recorded every single day.





Setting the Record Source When Using a Cable Box

If you are programming a timer recording with a cable box, your Record Source depends on whether or not you have setup Cable Box Control (see page 104)

- If Cable Box Control is on. set the Record Source to the actual cable channel you wish to record (recommended).
- If Cable Box Control is off, set the Record Source to Channel 2, 3, or 4 whichever your cable box uses - and manually select the channel you want to record on the cable box.

Set Recording Source

Use the number keys (1–3) to set the Record Source. The default setting is the current tuner (television) channel.

- 1 CH # Records from the Tuner. Use the number keys (0-9) to set the channel number.
- 2 Line 1 Records from the front line inputs
- 3 Line 2 Records from the rear line inputs.



	_				_	_	1 1	Ch#
	SE	T SOU	IRCE (1-	-4):01			H 2	Line 1
Aug	1	998	10:3	0PM	1H0	DM.	11-	
Su	Мо	Tu	We	Thu	Fr	Sa	3	Line 2
						1		
2	3	4	5	6	7	8		
9	10	11	12	13	14	15		
16	17	18	19	20	21	22		
23	24	25	26	27	28	29		
30	31							
1= 1	ime	(CH10		Au	to	J	

Complete Program Record

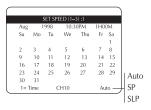
Complete Program Record, or CPR, helps to ensure you won't run out of tape before your Timer Recording is complete. When Auto is selected, the Timer event begins to record in SP; the **DVD-VCR** then calculates how much time is remaining on the tape and adjusts the record speed to SLP if necessary to fit the entire event. If there is not enough tape to record the entire event, the DVD-VCR will record in SLP until the end of the tape is reached.

8 Set Recording Speed

Use the number keys (1–3) to set the Recording Speed. The default setting is Auto.

- 1 Auto Complete Program Record (see sidebar).
- 2 SP Standard Play. Delivers best quality. A T-120 tape will record 2 hours.
- 3 SLP Super Long Play. Delivers maximum recording time. A T-120 tape will record 6 hours.





9 Confirm Settings

When all setting are complete, press **Return** to confirm the Timer event and view a summary of all programmed events.

- To program another event, select another available event number.
- To edit an event, select an event number that has already been programmed.
- To delete an event, use the joystick to select it and then press Clear.
- To exit the Event Summary screen, press **Return**.







Press the Clear button to delete an event

10 Programming is Complete!

The event is stored in memory and will record at the scheduled time. A Timer icon will appear on the front panel display to indicate that an event is programmed.

- If there is a problem with your Timer Recording, the Timer icon will flash and a Timer Error appears on the TV screen; see page 82.
- The VCR will automatically turn on when the Timer Recording begins.



Timer Recording Errors/Solutions

If there is a problem with your Timer Recording, the Timer icon will flash on the Front Panel Display and an error message will appear on the On-Screen Display. Once you correct the error, the event will begin if there is still time remaining for that event. You can also clear the event in the Event Summary screen.

Tape Missing

There is no videotape in the VCR deck.

Insert a videotape in the VCR deck.



Tape Missing Tab

The videocassette is missing the Record Safety Tab.

• Insert a video cassette with the Record Safety Tab intact, or place a small piece of adhesive tape over the opening to permit recording.



Not Ready

The VCR deck is not in Stop mode (e.g., it is playing, rewinding, etc.).

Press Stop to stop the VCR deck.



Overlapping Events

Two or more events are programmed to occur at the same time:

- When you program a new event, the DVD-VCR checks all timer events for conflicts. If two events overlap, you will be prompted to either delete one of the events, or allow them to overlap.
- If events overlap, the first event will be completely recorded, then the next event will start and the remainder of that event will be recorded.



VCR Plus+ Channel Mapping

The VCR Plus+ Programming System (VCR Plus+) greatly simplifies Timer Recording. To tape a show, just look up its PlusCode programming number in your newspaper or magazine listing, then enter it into the VCR Plus+ menu.

To get started, you must first match your local TV channels to the VCR Plus+ preassigned channels. This process is known as "Channel Mapping." Open "Setup Menu"

Press the **Setup** button.



Child Lock Set Clock DVD Setup VCR & Channel Setup Language/Langue/Idioma **↑**/.L. To. Move.

Select "VCR & Channel Setup"

Using the joystick, move the selection arrow to "VCR & Channel Setup," then push right to select.



Set Timer Recording Child Lock Set Clock DVD Setup → VCR & Channel Setur Language/Langue/Idioma → To Select RETURN To Quit

3 Select "VCR Plus Setup"

Move the selection arrow to "VCR Plus Setup," then push right to select.

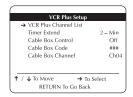


Channel Setup Date/Time Stamp Auto Play/Rewind Both Record Source Auto Panel Display ↑/↓ To Move → To Select RETURN To Go Back

4 Select "VCR Plus Channel List"

Move the selection arrow to "VCR Plus Channel List," then push right to select.





VCR Plus+ and Plus-Code are registered trademarks of Gemstar Development Corporation. The VCR Plus+ system is manufactured under license from Gemstar Development Corporation.

VCR Plus+ Channel Worksheet

You can use the worksheet below to find the local equivalents of the VCR Plus+ channels in your area. This information is provided in your local television listings or by contacting your local cable company.

5 Map Your Channels

Use the joystick to move up and down the VCR Plus+ Channel list, then use the number keys to enter your matching Local Channel.

• When finished, press **Return**.

VCR PLUS C	HANNEL LIST
VCR + CH	Local CH
01	01
02	02
03	03
04	04
05	05
↑ / ↓ To Move	0-9 To Change
Press RETU	RN To Finish

VCR Plus+	Your Local
Channel	Channel
08	
39	
35	
57	
54	
11	
42	
45	
98	
72	
14	
37	
53	
63	
92	
34	
80	
04	
47	
91	
17	
89	
33	
95	
96	
86	
	Channel 08 39 35 57 54 11 42 45 98 72 14 37 53 63 92 34 80 04 47 91 17 89 33 95 96

	VCR Plus+	Your Local
Network	Channel	Channel
History Channel	83	
Lifetime	46	
MSNBC	90	
MTV	48	
NBC	05	
Nickelodeon	38	
PBS	13	
QVC	99	
Sci-Fi Channel	88	
Showtime	41	
Showtime 2	97	
TBS	43	
TCM	72	
TLC	51	
TMC	58	
TNN	49	
TNT	52	
Univision	23	
UPN	21	
USA Network	44	
VH1	62	
Viewer's Choice		
Viewer's Choice		
WB	03	
WGN	55	

How to Set a VCR Plus+ Recording

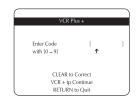
Once you have mapped your channels, you are ready to program a VCR Plus+ recording. Open up your local TV listings and jot down the VCR PlusCode number for the program you want to record. Then follow these simple instructions.

NOTE: If you want to program VCR Plus+ recordings from a cable box or DSS receiver, you must setup Cable Box Control, see pages 102-107.

Open VCR Plus+ Menu

Press the VCR Plus+ button on the remote control. If vou haven't set the clock, the Set Clock menu will appear. You must set it before you can program a VCR Plus+ Recording.





2 Enter VCR PlusCode Number

Use the number keys to enter the 2 to 8 digit VCR PlusCode number shown in your local television programming guide.

- If the code is not valid, INVALID CODE appears on the screen.
- To correct your entry, press Clear.
- Press the VCR Plus+ button to continue.





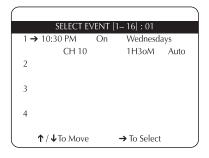
	6:00	6:30	7:00	7:30
3	News 200	Entertainment Tonight: Ben Aff- fleck. • 552	Jeopardy • 1397	Wheel of For- tune • 1397
CBS	News 5007	Hollywood Squares 2587	The King of Queens Carrie cheating. • (TVPG-L) 5945	Ladies Man: Jimmy accepts a lucarative job. • (TVPG) 8571
B) PBS	The NewsHour \ Jim Lehrer details ries. • 88736		Horizon: Michael Grant explores issues. • 5755	Keeping Up Appearances • 1281

VCR PlusCode numbers appear in most local and national TV listings.

3 View Event Summary

Basic programming is complete. The event will be recorded automatically on the date and time represented by the code you entered. As in Timer Recording, the event will appear on the Timer Summary screen.

- To edit the Event, use the joystick to select it and continue with Step 4.
- To delete an event, use the joystick to select it, and then press **Clear**.
- To exit the Event Summary screen, press Return.



4 Select "Set Type"

Push the joystick right repeatedly until "Set Type" appears on the menu screen.

NOTE: Do not make any changes to Month, Day, Hour, Minute, Length (H) or Length (M), as this will change your VCR Plus+ settings.



		SET TY	/PE (14	1):1		
Aug	. 1	998	10:3	OPM .	1H0	MC
Su	Mo	Tu	We	Thu	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					
1=	Time	(CH10		Au	to

5 Set Type (How Often to Record)

Use the number keys (1–4) to set how often the event will be recorded. The default setting is "1–Time".

- 1 1-Time The event will be recorded only once.
- **2** Monday-Friday The event will be recorded every weekday.
- **3 Weekly** The event will be recorded once a week.
- 4 Always The event will be recorded every single day.



_			SET TY	/PE (1	1):1 —			\int_{2}^{1}	
	Aug	1	998	10:3	0PM	1H0	DM.	1 3	Weel
	Su	Мо	Tu	We	Thu	Fr	Sa 1	4	Alwa
	2	3	4	5	6	7	8		
	9	10	11	12	13	14	15		
	16	17	18	19	20	21	22		
	23	24	25	26	27	28	29		
	30	31							
	1=1	ime	(CH10		Au	to	1	

6 Select "Set Speed"

Push the joystick right repeatedly until "Set Speed" appears on the menu screen.

NOTE: Do not make any changes to "Set Source," as this will change your VCR Plus+ settings.



		SET SPI	EED (1-	3):1		
Aug	1	998	10:3	0PM	1H0	MC
Su	Mo	Tu	We	Thu	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					
1= 1	īme	(H10		Au	to

Complete Program Record

Complete Program Record, or CPR, helps to ensure you won't run out of tape before your Timer Recording is complete. When Auto is selected, the Timer event begins to record in SP; the **DVD-VCR** then calculates how much time is remaining on the tape and adjusts the record speed to SLP if necessary to fit the entire event. If there is not enough tape to record the entire event, the DVD-VCR will record in SLP until the end of the tape is reached.

7 Set Recording Speed

Use the number keys (1–3) to set the Recording Speed. The default setting is Auto.

- 1 Auto Complete Program Record (see sidebar).
- 2 SP Standard Play. Delivers best quality. A T-120 tape will record 2 hours.
- 3 SLP Super Long Play. Delivers maximum recording time. A T-120 tape will record 6 hours.



				EED (1-				
	Aug	1998		10:30PM		1H00M		
	Su	Mo	Tu	We	Thu	Fr	Sa	
							1	
	2	3	4	5	6	7	8	
	9	10	11	12	13	14	15	
	16	17	18	19	20	21	22	
	23	24	25	26	27	28	29	Auto
	30	31						11
	1= Time		CH10			Auto -		SP SP
_							_	CLD

8 Confirm Settings

When all setting are complete, press **Return** to confirm the Timer event and view a summary of all programmed events.

• To exit the Event Summary screen, press **Return**.





VCR Plus+ Timer Extend

To help ensure that your VCR Plus+ programs record in their entirety, you can automatically extend recording 2 or 5 minutes before and after their scheduled time.

Open "Setup Menu"

Press the **Setup** button.





Select "VCR & Channel Setup"

Using the joystick, move the selection arrow to "VCR & Channel Setup," then push right to select.





3 Select "VCR Plus Setup"

Move the selection arrow to "VCR Plus Setup," then push right to select.



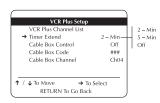


4 Set "Timer Extend"

Move the selection arrow to "Timer Extend," then push right to select from the following options:

- Off Timer Extend is disabled.
- 2-Min Programs will record 2 minutes before and after their scheduled time.
- 5-Min Programs will record 5 minutes before and after their scheduled time.





The Clock/Counter Button

The DVD-VCR Search/Index features allow you to scan and search for Index Marks, quickly find blank tape, search for tape counter positions, and return to 0:00:00. The real-time tape counter gives you real-time feedback on the precise position of your DVDs and videotapes.

Clk/Ctr Button

Press the Clk/Ctr button repeatedly to cycle the front panel display through the following three views:



Clock

Shows you the current time as set in the Set Clock menu.



Real-Time Counter

Shows you the current counter position in the DVD or VCR deck in hours, minutes, and seconds.



3 Time Remaining (VHS only)

Shows you the amount of time left on the tape in the VCR deck, computed by subtracting the current tape position from the total tape length in hours and minutes.



NOTE: The Clock/Counter/Time Remaining display will not appear if there is a deck status message on the front panel display.

Placing Index Marks

Index Marks are like bookmarks on your videotapes. They are inserted automatically at the start of every recording, or you can place them manually anywhere on a tape. Later you can locate these "bookmarks" using Index Search or Index Scan.

Automatic Index Marks

Index Marks are placed automatically whenever you start recording, including OTR (One Touch Recording), Timer Recording, and VCR Plus+ Recording.



Manual Index Marks

You can place an Index Mark manually any time a recording is in progress by pressing the Mark button on the remote control. "Index" will flash briefly on the On-Screen Display while the mark is recorded.



Index Scan

Index Scan will fast-forward or rewind to the nearest Index Mark, play a few seconds of tape, and then fast-forward or rewind to the next Index Mark. When you find the show you want to watch, press Play.

Tip: Use this feature with the Date/Time Stamp to quickly find Timer Recordings on your tapes. For example, when Index Scan stops at an Index Mark and plays a few seconds of tape, you will see the date & time the show was recorded.

Open "Search Menu"

From Stop or Play mode, press the **Search** button.





2 Select "Index Search/Scan"

Using the joystick, move the selection arrow to "Index Search/Scan," then push right to select.





3 Scan for Index Marks

Press Fast-Forward or Rewind to begin scanning for Index Marks forwards or backwards.

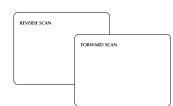




4 Review the Tape

When Index Scan locates an Index Mark, it will play the tape for 5 seconds. If it is the scene you want to watch, press the Play/Pause button. If it is not, the VCR will automatically search for the next Index Mark.





Index Search

Index Search will fast-forward or rewind a specified number of Index Marks from 1 to 99. When it reaches the desired Index Mark, it will play the tape. Use Index Search when you know the exact Index Mark you want to locate.

Open "Search Menu"

From Stop or Play mode, press the **Search** button.





2 Select "Index Search/Scan"

Using the joystick, move the selection arrow to "Index Search/Scan," then push right to select.





3 Enter # of Marks to Search

Enter a number from 1 to 99; e.g. for "5" press "0-5".





4 Search for Index Marks

Press Fast-Forward or Rewind to begin searching forward or backward for the specified Index Mark. When the VCR locates the Index Mark, it will play the tape.





Blank Search

With Blank Search you can easily locate the next available blank (unused) segment on your videotape.

1 Open "Search Menu"

From Stop or Play mode, press the **Search** button.





2 Select "Blank Search"

Using the joystick, move the selection arrow to "Blank Search," then push right to select.

- The DVD-VCR will automatically search for the next available blank space on your tape and stop.
- If no blank space is found, the tape will be ejected.







Direct Time Search

Use Direct Time Search to locate a specific tape location in hours, minutes, and seconds. This is useful for editing purposes, i.e. you can advance the tape directly to the beginning of the desired scene.

Open "Search Menu"

From Stop or Play mode, press the **Search** button.





Select "Direct Time Search"

Using the joystick, move the selection arrow to "Direct Time Search," then push right to select.





3 Select +/- Counter Value

Press 1 for positive or 2 for negative counter values.



TIME SEARCH Search To : --:--:--Enter Counter Value Enter [1] = Pos Or [2] = Neg Press CLEAR To Correct MENU to Ouit

4 Enter the Time

Use the number keys (0-9) to enter the desired time in hours, minutes, and seconds. Press Clear if you need to backup and re-enter a number.



TIME SEARCH Search To: 01:25:16 Enter Counter Value Press CLEAR To Correct MENU to Ouit

5 Start the Search

Press the **Search** button to advance the tape to the specified time.



TIME SEARCH Searching To: 01:25:16

Return to 0:00:00

You can advance your videotapes to tape counter position 0:00:00 at the touch of a button. Remember that pressing the Clear button resets the tape counter position to 0:00:00.

1 Open "Search Menu"

From Stop or Play mode, press the **Search** button.





2 Select "Return to 0:00:00"

Using the joystick, move the selection arrow to "Return to 0:00:00," then push right to select.

• The tape will rewind or fast-forward to tape counter position 0:00:00.







S-Video/Component Video Connections (for DVD)

If your television is equipped with S-Video or Component Video inputs, you can enjoy superior video quality when watching DVDs with your DVD-VCR

NOTES:

- You can choose EITHER S-Video OR Component, but NOT both.
- You must follow the "Alt Video Out" instructions on page 98 to activate your alternative video selection.
- You can ONLY watch the DVD player through the S-Video or Component Video connection method. The tuner and VCR will still be viewed through the RF or line inputs.

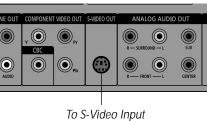
1 Connect S-Video Out to TV

Connect an S-Video cable from the S-Video Out on the back panel of the DVD-VCR to the S-Video Input on your television.

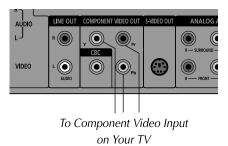
OR

Connect Component Video Out to TV

Connect a component video cable from the Component Video Out on the back panel of the DVD-VCR to the Component Video Input on your television.



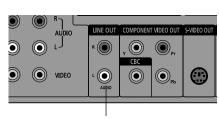
To S-Video Input on Your TV



2 Connect Audio Out

Connect RCA audio/video cables from the Left/Right Line Out jacks on the back panel of the DVD/VCR to the Left/Right Audio Line In jacks on your television.

- You must use these Line Out jacks when connecting the DVD-VCR to your TV with the S-Video or Component Video Output.
- Please continue on the next page with "Alt Video Out Setting" to activate your connection.



To Left/Right Audio Inputs on Your TV

Alt Video Out Setting

If you connected your DVD-VCR to your television using the S-Video or Component Video Out jacks, you MUST set the "Alt (alternative) Video Out" selection in the on-screen menu system.

 You can ONLY watch the DVD player through the S-Video or Component Video connection method. The tuner and VCR will still be viewed through the RF or line inputs.

1 Open "Setup Menu"

Press the **Setup** button.





2 Select "DVD Setup"

Using the joystick, move the selection arrow to "DVD Setup," then push right to select.





3 Select "Alt Video Out"

Move the selection arrow to "Alt Video Out," then push right to select from the following options:

- Off Indicates that you are using the standard RF or Line Out jacks to connect your DVD-VCR to your TV or display device.
- S-Video Indicates that you are using the S-Video Out jack on the rear panel to connect to your TV.
- Component Indicates that you are using the Component Video Out jacks on the rear panel to connect to your TV.



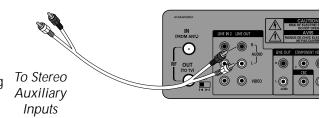


Stereo Connections

You can enjoy stereo sound when watching movies and TV shows by connecting your DVD-VCR to your home stereo system or stereo TV.

7 Connect DVD-VCR to Stereo

Connect RCA cables from the Line Out Left & Right Audio jacks on the back panel of the DVD-VCR to the Auxiliary Inputs on your stereo receiver. If you are using a stereo television, connect the Video Output as well.



2 Set Stereo to Auxiliary Mode

Set your stereo receiver or television to "Aux" or "Tape," whichever selects the line input for your particular device.

3 Play a Tape

Insert a DVD or Hi-Fi stereo videotape in your system and adjust the volume on your stereo receiver or television. You should hear the audio through your stereo speakers.

 If you still do not hear stereo sound, press the Audio button until "Stereo" appears on the on-screen display.



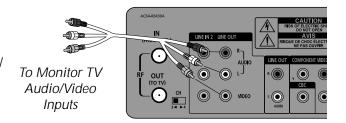
Monitor TV Connections

Monitor-style televisions offer improved sound and picture over regular televisions because they receive the audio and video signals directly from the DVD-VCR through the line inputs.

NOTE: A monitor television is not the same as a computer monitor.

7 Connect VCR to Monitor TV

Connect RCA cables from the Audio/Video Line Out jacks on the back panel of the DVD-VCR to the Audio/Video Line Inputs of your monitor TV.



2 Set TV to Auxiliary Mode

Set your monitor TV to "Aux," "Video," or "Line." Refer to your monitor's owner's manual for the correct setting.



3 Connection is Complete

NOTE: With this connection, the TV/VCR button has no effect. It is as if the TV/VCR button were always set to VCR.



Connecting Other Video Equipment

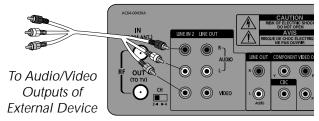
You can connect a wide variety of audio/video equipment to your DVD-VCR, including:

- An additional VCR
- Laser Disc Player
- DVD Player
- Camcorder
- Satellite Receiver
- Video Game

Since all of these devices use essentially the same connections, they will be described together.

Connect Device to DVD-VCR

Connect RCA cables from the Audio and Video Line Outputs of your external device to the Audio and Video Line Inputs on the front or back panel of the DVD-VCR. To Audio/Video



Watch Device

Play your external device, then press the TV View button until the playback from Line 1 (front panel inputs) or Line 2 (rear panel inputs) appears on your TV screen.



3 Record Device

First, play your external device. Next, press the TV View button until the playback from Line 1 (front panel inputs) or Line 2 (rear panel inputs) appears on your TV screen. Then press **Record** on the VCR deck.





4 Timer Record From Device

Select Line 1 or Line 2 as your record source in the Timer Record menu. All other Timer Record settings should be set in the usual manner; see page 77.

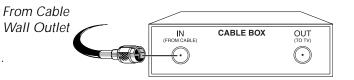


Cable Box Connections

Follow these instructions to connect a Cable Box to your DVD-VCR.

7 Connect Cable to Cable Box

Connect an RF antenna cable from your cable wall outlet to the "In from Cable" jack on the Cable Box.



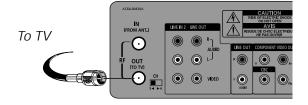
2 Connect Cable Box to DVD-VCR

Connect a second RF cable from the "Out to TV" jack on the Cable Box to the "IN (FROM ANT.)" jack on the back panel of the DVD-VCR.



3 Connect DVD-VCR to TV

Connect the supplied RF cable from the "OUT (TO TV)" jack on the back panel of the DVD-VCR to your television's "Antenna In" jack.



4 Plug In DVD-VCR

Connect the DVD-VCR power cord to a standard 120V/60Hz wall outlet.



5 Turn On TV, DVD-VCR & Cable Box

Press the power buttons on the remote control, TV, and Cable Box.





6 Set DVD-VCR Output Channel

Set the channel switch on the back panel of the DVD-VCR to 3 or 4, whichever is NOT used by your cable hox.



Tune TV to the Same Channel

Select the channel you used in step 6.



8 Connection is Complete!

The "Language/Langue/Idioma" menu will appear on your television screen. Please proceed with Auto Setup on page 9.

- After Auto Setup is complete, you MUST run Cable Box Control Setup; see page 104. This will allow you to automatically control the cable box with your DVD-VCR.
- Use your cable box to select channels.
- If you are not getting a good picture, repeat steps 6 and 7 using the other channel; i.e. channel 4 instead of channel 3.

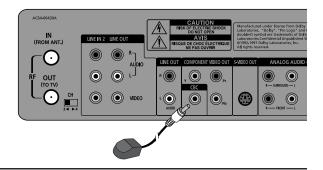


Cable Box Control Setup

Cable Box Control uses a special "Cable Mouse" that automatically selects channels on your cable box when Timer Recording. Once you attach the Cable Mouse, you will need to activate Cable Box Control in the menu system, then program the 2-digit code for your specific brand of Cable Box.

1 Plug In the Cable Mouse

Plug the supplied Cable Mouse into the Cable Box Control jack on the back panel of your DVD-VCR.



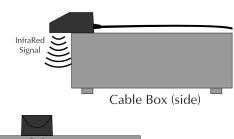
2 Peel Off Tape Covering

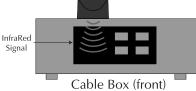
Peel off the tape covering from the bottom of the Cable Mouse.



3 Attach Cable Mouse

Position the Cable Mouse on top of the Cable Box directly over the IR (Infrared) sensor. Make sure the front half of the Cable Mouse extends over the front of the Cable Box (see diagrams at right).





4 Open "Setup Menu"

Press the **Setup** button.

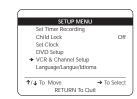




5 Select "VCR & Channel Setup"

Using the joystick, move the selection arrow to "VCR & Channel Setup," then push right to select.





6 Select "VCR Plus Setup"

Move the selection arrow to "VCR Plus Setup," then push right to select.



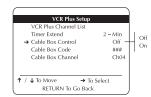


7 Turn On "Cable Box Control"

Move the selection arrow to "Cable Box Control," then push right to turn this feature "On."

• The "Cable Box Code" and "Cable Box Output" options will appear when "Cable Box Control" is turned on.



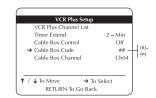


8 Set "Cable Box Code"

Move the selection arrow to "Cable Box Code," then use the number keys to enter the 2-digit code for your brand of cable box from the list below.

- If the code is valid, the cable box will change to Channel 09. If not, try selecting another code.
- This VCR may not operate all brands of Cable Box.





Cable Box/DSS Brand Anvision	2-Digit Code 13,20,21,22,23,24,25,26,58,62	Cable Box/DSS Brand Pulser	2-Digit Code 43,44
Archer	29,42,44	Randtek	13,20,21,22,23,24,25,26,58,62
Cablestar	13,20,21,22,23,24,25,26,58,62	RCA	06,08,16,17,97
Cableview	42,44	Regal	14,23,41
Citizen	42,44	Rembrandt	32
Curtis	08,09,56,61	Samsung	04,06,42,44,78,86
Diamond	29,44	Scientific Atlanta	08,09,61,56
Eagle	13,20,21,22,23,24,25,26,58,62	Sheritech	26,27,28
Eastern	28	SL Mark	04,06,42,78
GC Brand	42,44	Sony	98
Gemini	04,30	Sprucer	06,08,16,17
General Instruments	01,02,03,04,55,75,85	Stargate	04,06,42,44,78
Hamlin	14,15	Sylvania	19
Hitachi	31,79,80	Teknika	74
Jerold	01,02,03,04,55,75,83,85	Telecaption	77
Macom	31,79,80	Teleview	04,06,42,78
Magnavox	13,20,21,22,23,24,25,26,58,62	Texscan	18,19
Movietime	32,38,39	TOCOM	33,34,48,49,73
NSC	38,39	Toshiba	36,99
Oak	10,11,12,13,46	Unika	20,21,29,42,44
Oak Sigma	46	Universal	43,52,63,82
Panasonic	06,08,16,17	Videoway	07,45,50,59
Philips	13,20,21,22,23,24,25,26,58,62	Viewstar [']	13,20,21,22,23,24,25,26,58,62
Pioneer	05,06	Warner Amex	06
	·	Zenith	07,45,50,59

9 Set "Cable Box Output"

Move the selection arrow to "Cable Box Output," then push right to select from the following options:

- Ch ## Indicates that your cable box is connected to the "IN (FROM ANT.)" jack on the DVD-VCR back panel and set to the channel that your cable box outputs. Use the number keys to set the appropriate channel.
- Line 1 Indicates that your cable box is connected to the front line inputs.
- Line 2 Indicates that your cable box is connected to the rear line inputs.





Cable Box Control Operation

With Cable Box Control enabled, you can set the Record Source for Timer Recordings to the actual cable channel you wish to record (see page 79). The Cable Mouse will send the proper channel to your cable box automatically.

• If Cable Box Control is disabled, you must set the Record Source to Channel 2, 3, or 4—whichever your cable box uses—and manually select the channel you wish to record on the cable box.

Appendix B - Help

Technical Specifications

If you don't find the answers you need in this manual, you can contact our Customer Service Department as follows:

• **Phone**: (480) 922-0896

Office hours:

Monday-Friday, 6:00 a.m. to 9:00 p.m. MST

Saturday-Sunday, 8:00 a.m. to 4:00 p.m. MST

E-Mail:

"customerservice@ sensoryscience.com"

Web:

"www.govideo.com" or "www.sensoryscience. com". Our website includes downloadable manuals and spec sheets as well as a listing of authorized Go-Video service centers.

INPUTS

AUDIO 2 Stereo audio inputs, RCA Connector, -8dbm, $47K\Omega$, front and rear

VIDEO 2 Composite video inputs, RCA Connector, 75Ω , 1Vp-p

RF Antenna or CATV Input, F-Connector, 75Ω

OUTPUTS

HEADPHONE
 AUDIO
 DVD only:
 3.5mm Stereo Headphone jack with Volume Control
 2 Stereo audio outputs, RCA Connector, -8dbm, 1.5kΩ
 5.1 Channel Dolby Digital Output, RCA Connector

DVD only: 2 Digital audio outputs, 1 optical, 1 coaxial

VIDEO 1 Composite video output, RCA Connector, 75Ω , 1Vp-p

DVD only: 1 S-Video output, S-Connector, 75Ω , Y = 1.0Vp-p, C = 0.286Vp-p

DVD only: 1 Component video output, 75Ω , Y = 1.0Vp-p, Pb = 0.7Vp-p, Pr = 0.7Vp-p

RF Channel 3 or 4

IR Cable Mouse output for Cable Box Control (Cable Mouse included)

VCR SPECIFICATIONS

VIDEO SYSTEM 1/2-inch VHS system, 4 rotary head helical scanning; FM azimuth luminance;

chrominance: converted sub system phase shift

AUDIO TRACK Normal: 1 track; Hi-Fi: 2 track PLAY/RECORD TIME T-180 tape: SP 3 hours, SLP 9 hours

FF/REW TIME T-120 tape: <2 minutes

HEADS

Video: DA 4 rotary Duraheads™

Audio: 2 rotary heads (Hi-Fi); 1 stationary head (Linear)

Control: 1 stationary head

Erase: 1 full track, 1 audio track
WOW & FLUTTER Less than 0.005% (Hi-Fi)
FREQ. RESPONSE 20-20,000 Hz (Hi-Fi)

DVD SPECIFICATIONS

DISC COMPATIBILITY CD, CD-R, Not compatible with CD-R/W

DVD-Video, CD-Digital Audio (5" and 3.5"), CD-Video, MP3 files on CD-ROM

FREQ. RESPONSE 96/48 kHz Sampling: 4 Hz-22kHz

S/N RATIO 110 dB DYNAMIC RANGE 96 dB THD 0.003 %

SYSTEM SPECIFICATIONS

POWER REQUIREMENT 120V AC, 60 Hz, 34 watts

CLOCK BACKUP TIME ~6 hours

ENVIRONMENT 41-104 F (5-40 C); 10%-75% humidity

WEIGHT 21.5 lbs.

DVD-VCR Limited Warranty



Who Provides the Limited Warranty

During the warranty period, the Go-Video Warranty Administrator will honor DVD-VCR service for 90 days labor, 1 year parts from the original date of consumer purchase. See below for Commercial, Industrial or Educational use coverage. The DVD-VCR remote control is warranted for 90 days from the date of purchase.

Who is Protected

This warranty protects the original consumer owner of this Go-Video product.

What is Covered and How Long

This warranty covers internal operating parts and service/labor to repair or replace covered parts in this Go-Video product for 90 days labor, 1 year parts, from the date of purchase, defined as follows: (1) Original Consumer Retail Purchase; (2) First Rental Purchase Agreement; or (3) First Lease Purchase Agreement (the "Warranty Period"). Labor and replacement parts supplied during the Warranty Period are covered only for the remaining portion of the original Warranty Period. The Go-Video Warranty Administrator shall have no liability for service under this warranty if non-OEM (Original Equipment Manufacturer) replacement parts are used in the repair of your Go-Video product.

What the Owner Must Do If Service is Required

If service under this warranty is required, contact the Go-Video Warranty Administrator at (480) 922-0896 to determine the nearest authorized Go-Video service center.

What are the Exceptions

• This warranty does **not** cover: (1) Normal maintenance service, such as video head cleaning. (2) Damage from misuse, abuse neglect or accident, natural disasters or Acts of God. (3) Cabinetry, decorative parts, A/C adapters, knobs or buttons. (4) The foreign country use of this product. (5) Go-Video product which has

been electronically or mechanically modified in any way or incorporated into other products. (6) Installation and setup service adjustments. (7) Owner instruction. Your Owner's Guide provides information regarding operating instructions and user controls. For additional information, contact your authorized Go-Video dealer.

- Go Video is not responsible for any shipping, handling or insurance charges.
- This Exclusive Limited Warranty excludes all incidental and consequential damages. Some states do
 not allow the exclusion of incidental and consequential damages, so the above exclusion may not
 apply to you.
- ALL IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND
 FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO THE DURATION OF THIS
 WARRANTY PERIOD. Some states do not allow limitations on how long an implied warranty lasts, so
 the above limitation may not apply to you.
- This Exclusive Limited Warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Go-Video Warranty Administrator

Sensory Science Corp. 7835 East McClain Drive Scottsdale, Arizona 85260-1732 (480) 922-0896 customerservice@sensoryscience.com



7835 East McClain Drive Scottsdale, Arizona USA 85260 www.sensoryscience.com www.govideo.com

Printed in Korea